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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN 02	STN pricing information for 2008 now available
NEWS	3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	5	JAN 28	MARPAT searching enhanced
NEWS	6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	9	FEB 08	STN Express, Version 8.3, now available
NEWS	10	FEB 20	PCI now available as a replacement to DPCI
NEWS	11	FEB 25	IFIREF reloaded with enhancements
NEWS	12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS	14	MAR 31	IFICDB, IFIPAT, and IFIUIDB enhanced with new custom IPC display formats
NEWS	15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS	16	MAR 31	CA/CAPLUS and CASREACT patent number format for U.S. applications updated
NEWS	17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS	18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	19	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS	20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS	21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS	22	APR 28	IMSRESEARCH reloaded with enhancements
NEWS EXPRESS	FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008		
NEWS HOURS	STN Operating Hours Plus Help Desk Availability		
NEWS LOGIN	Welcome Banner and News Items		
NEWS IPC8	For general information regarding STN implementation of IPC 8		

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 09:43:22 ON 08 MAY 2008

=>

Uploading

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Choice (Y/n):

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Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 09:43:41 ON 08 MAY 2008

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAY 2008 HIGHEST RN 1019993-29-3  
DICTIONARY FILE UPDATES: 7 MAY 2008 HIGHEST RN 1019993-29-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

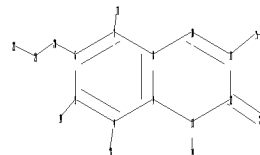
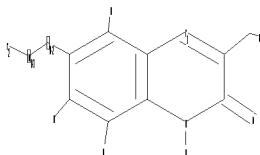
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

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```

chain nodes :
14 15 16 17 18 19 20 21 22 27
ring nodes :
4 5 6 7 8 9 10 11 12 13
chain bonds :
4-18 5-19 6-20 7-17 11-15 12-27 13-14 15-16 20-21 21-22
ring bonds :
4-5 4-9 5-6 6-7 7-8 8-9 8-10 9-13 10-11 11-12 12-13
exact/norm bonds :
4-18 5-19 6-20 7-17 8-10 9-13 10-11 11-12 11-15 12-13 12-27 13-14 15-16
20-21 21-22
normalized bonds :
4-5 4-9 5-6 6-7 7-8 8-9

```

G1:C,N

G2:C,O,N

G3

Match level :

```

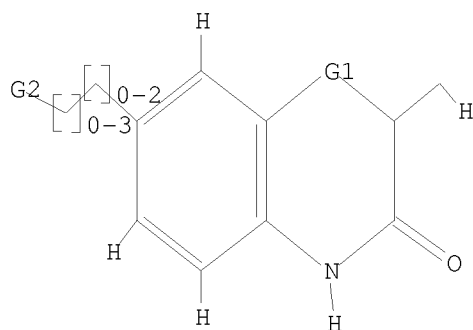
4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom
14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 27:CLASS

```

L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS  
L1 STR



G1 C,N  
G2 C,O,N

Structure attributes must be viewed using STN Express query preparation.

=> S L1

SAMPLE SEARCH INITIATED 09:44:00 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 11058 TO ITERATE

18.1% PROCESSED 2000 ITERATIONS 50 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 214858 TO 227462  
PROJECTED ANSWERS: 9440 TO 12232

L2 50 SEA SSS SAM L1

=> S L1 SSS FULL

FULL SEARCH INITIATED 09:44:08 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 220811 TO ITERATE

100.0% PROCESSED 220811 ITERATIONS 10264 ANSWERS  
SEARCH TIME: 00.00.02

L3 10264 SEA SSS FUL L1

=> FILE CAPLU

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	178.82	179.03

FILE 'CAPLUS' ENTERED AT 09:44:37 ON 08 MAY 2008  
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FILE LAST UPDATED: 7 May 2008 (20080507/ED)

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<http://www.cas.org/infopolicy.html>

=> S L3

L4 299 L3

=> D 1-5

L4 ANSWER 1 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:237568 CAPLUS  
DN 148:393737  
TI Docking Study Yields Four Novel Inhibitors of the Protooncogene Pim-1 Kinase  
AU Pierce, Albert C.; Jacobs, Marc; Stuver-Moody, Cameron  
CS Vertex Pharmaceuticals, Incorporated, Cambridge, MA, 02139, USA  
SO Journal of Medicinal Chemistry (2008), 51(6), 1972-1975  
CODEN: JMCMAR; ISSN: 0022-2623  
PB American Chemical Society  
DT Journal  
LA English  
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:194147 CAPLUS  
DN 148:426840  
TI Discovery of potent pteridine reductase inhibitors to guide antiparasite drug development  
AU Cavazzuti, Antonio; Paglietti, Giuseppe; Hunter, William N.; Gamarro, Francisco; Piras, Sandra; Loriga, Mario; Alleca, Sergio; Corona, Paola; McLuskey, Karen; Tulloch, Lindsay; Gibellini, Federica; Ferrari, Stefania; Costi, Maria Paola  
CS Dipartimento di Scienze Farmaceutiche, Universita di Modena e Reggio Emilia, Modena, 41100, Italy  
SO Proceedings of the National Academy of Sciences of the United States of America (2008), 105(5), 1448-1453  
CODEN: PNASA6; ISSN: 0027-8424  
PB National Academy of Sciences  
DT Journal  
LA English  
RE.CNT 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:1452342 CAPLUS  
DN 148:158850  
TI Comparative Molecular Field Analysis of quinoline derivatives as selective and noncompetitive mGluR1 antagonists  
AU Sekhar, Y. Nataraja; Nayana, M. Ravi Shashi; Ravikumar, Muttineni; Mahmood, S. k.  
CS Bioinformatics Division, Department of Environmental Microbiology, Osmania University, Hyderabad, India

SO Chemical Biology & Drug Design (2007), 70(6), 511-519  
 CODEN: CBDDAL; ISSN: 1747-0277  
 PB Blackwell Publishing Ltd.  
 DT Journal  
 LA English  
 RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:1411046 CAPLUS  
 DN 148:214976  
 TI Rearrangement of furo[2,3-c]quinoline-2,4(3aH,5H)-diones to  
 furo[3,4-c]quinoline-3,4(1H,5H)-diones  
 AU Kafka, Stanislav; Kosmrlj, Janez; Klasek, Antonin; Pevec, Andrej  
 CS Faculty of Technology, Tomas Bata University in Zlin, Zlin, 762 72, Czech  
 Rep.  
 SO Tetrahedron Letters (2007), Volume Date 2008, 49(1), 90-93  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier Ltd.  
 DT Journal  
 LA English  
 RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:1391133 CAPLUS  
 DN 148:191869  
 TI Microwave-assisted one-pot synthesis of some new furo[2,3-b]quinolines  
 using potassium carbonate under solvent-free conditions  
 AU Raghavendra, M.; Naik, Halehatty S. Bhojya; Sherigara, Bailure S.  
 CS Department of P G Studies and Research in Industrial Chemistry, School of  
 Chemical Sciences, Kuvempu University, Karnataka, India  
 SO Canadian Journal of Chemistry (2007), 85(12), 1041-1044  
 CODEN: CJCHAG; ISSN: 0008-4042  
 PB National Research Council of Canada  
 DT Journal  
 LA English  
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D 6-10

L4 ANSWER 6 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:1364437 CAPLUS  
 DN 148:33637  
 TI Substituted quinolones as ATP-utilizing enzyme inhibitors and their  
 preparation, compositions, and uses thereof  
 IN Dickson, John K.; Chen, Ke; Hodge, Carl Nicholas  
 PA Amphora Discovery Corporation, USA  
 SO PCT Int. Appl., 143pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 2007136592	A2	20071129	WO 2007-US11484	20070510
	WO 2007136592	A3	20080228		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,			
		CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB,			
		GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,			

KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG,  
 MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT,  
 RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR,  
 TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,  
 GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

US 20070287706 A1 20071213 US 2007-803140 20070510  
 PRAI US 2006-801881P P 20060518  
 OS MARPAT 148:33637

L4 ANSWER 7 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:1177863 CAPLUS  
 DN 147:469247  
 TI Preparation of quinolones derivatives useful as inducible nitric oxide  
 synthase inhibitors  
 IN Roppe, Jeffrey R.; Bonnefous, Celine; Smith, Nicholas D.; Lindstrom,  
 Andrew K.; Noble, Stewart A.; Hassig, Christian A.; Payne, Joseph E.;  
 Zhuang, Hui; Chen, Xiaohong; Duron, Sergio G.  
 PA Kalypsys, Inc., USA  
 SO PCT Int. Appl., 238pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007117778	A2	20071018	WO 2007-US62769	20070223
WO 2007117778	A3	20080207		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				

PRAI US 2006-776561P P 20060224  
 US 2006-848696P P 20061002  
 OS MARPAT 147:469247

L4 ANSWER 8 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:1089909 CAPLUS  
 DN 147:406842  
 TI Preparation of 1,2-dihydroquinolin-2-one, 1,2-dihydroquinoxalin-2-one, and  
 1,2-dihydronaphthyridin-2-one derivatives for treating ocular hypertension  
 IN Doherty, James B.; Shu, Min; Shen, Dong-Ming; Zhang, Fengqi  
 PA Merck & Co., Inc., USA  
 SO PCT Int. Appl., 92pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007108968	A2	20070927	WO 2007-US6109	20070309

WO 2007108968 A3 20071129

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,  
KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN,  
MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,  
RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,  
GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRAI US 2006-781904P P 20060313  
OS MARPAT 147:406842

L4 ANSWER 9 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:969605 CAPLUS

DN 147:323004

TI Preparation of pyrimidine-2,4-diamines for inhibition of the JAK pathway

IN Argade, Ankush; Sran, Arvinder; Carroll, David; Clough, Jeffrey; Tso, Kin;  
Bhamidipati, Somasekhar; Thota, Sambaiah; Singh, Rajinder; Taylor,  
Vanessa; Li, Hui; Masuda, Esteban

PA Rigel Pharmaceuticals, Inc., USA

SO U.S. Pat. Appl. Publ., 106pp., Cont.-in-part of U.S. Ser. No. 450,901.  
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070203161	A1	20070830	US 2007-678429	20070223
	US 20060293311	A1	20061228	US 2006-450901	20060608
PRAI	US 2006-776636P	P	20060224		
	US 2006-450901	A2	20060608		
	US 2006-871098P	P	20061220		
	US 2005-689032P	P	20050608		
	US 2005-706638P	P	20050808		
OS	MARPAT 147:323004				

L4 ANSWER 10 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:874181 CAPLUS

DN 147:257784

TI Preparation of benzoxazines and related nitrogen-containing heterobicyclic  
compounds as mineralocorticoid receptor modulators.

IN Iijima, Toru; Yamamoto, Yasuo; Akatsuka, Hidenori; Kawaguchi, Takayuki

PA Tanabe Seiyaku Co., Ltd., Japan

SO PCT Int. Appl., 140pp.  
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007089034	A1	20070809	WO 2007-JP52165	20070201
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM

PRAI JP 2006-25403 A 20060202  
JP 2006-275917 A 20061010

OS MARPAT 147:257784

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D 11-15

L4 ANSWER 11 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:854383 CAPLUS  
DN 147:180202  
TI High-conductance calcium-activated potassium channels: validated targets  
for smooth muscle relaxants?  
AU Garcia, Maria L.; Shen, Dong-Ming; Kaczorowski, Gregory J.  
CS Department of Ion Channels, Merck Research Laboratories, Rahway, NJ,  
07065, USA  
SO Expert Opinion on Therapeutic Patents (2007), 17(7), 831-842  
CODEN: EOTPEG; ISSN: 1354-3776  
PB Informa Healthcare  
DT Journal; General Review  
LA English  
RE.CNT 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:840337 CAPLUS  
DN 147:406712  
TI Synthesis of diastereomeric 2,4-disubstituted pyrano[2,3-b]quinolines from  
3-formyl-2-quinolones through O-C bond formation via intramolecular  
electrophilic cyclization  
AU Singh, Mrityunjay K.; Chandra, Atish; Singh, Bhawana; Singh, Radhey M.  
CS Department of Chemistry, Banaras Hindu University, Varanasi, 221 005,  
India  
SO Tetrahedron Letters (2007), 48(34), 5987-5990  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Ltd.  
DT Journal  
LA English  
OS CASREACT 147:406712  
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:741976 CAPLUS  
DN 147:291397  
TI Nonnucleoside inhibitor of measles virus RNA-dependent RNA polymerase  
complex activity  
AU White, Laura K.; Yoon, Jeong-Joong; Lee, Jin K.; Sun, Aiming; Du, Yuhong;  
Fu, Haian; Synder, James P.; Plemper, Richard K.  
CS Department of Pediatrics, Emory University School of Medicine, Atlanta,  
GA, 30322, USA  
SO Antimicrobial Agents and Chemotherapy (2007), 51(7), 2293-2303  
CODEN: AMACCQ; ISSN: 0066-4804  
PB American Society for Microbiology  
DT Journal  
LA English

RE.CNT 54        THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4    ANSWER 14 OF 299    CAPLUS    COPYRIGHT 2008 ACS on STN  
AN    2007:702537    CAPLUS  
DN    147:110180  
TI    HDP (heme detoxification protein) involved in hemozoin formation in  
Plasmodium and Theileria as an anti-protozoal target, and high-throughput  
screening for antimalarial HDP inhibitors  
IN    Rathore, Dharmender; Jani, Dewal; Nagarkatti, Rana  
PA    USA  
SO    U.S. Pat. Appl. Publ., 123pp., Cont.-in-part of U.S. Ser. No. 249,355.  
CODEN: USXXCO  
DT    Patent  
LA    English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	US 20070148185	A1	20070628	US 2006-549482	20061013
	US 20070087012	A1	20070419	US 2005-249355	20051014
PRAI	US 2005-249355	A2	20051014		

L4    ANSWER 15 OF 299    CAPLUS    COPYRIGHT 2008 ACS on STN  
AN    2007:521015    CAPLUS  
DN    147:30962  
TI    Preparation of 1,2-dihydroquinoline derivatives as inhibitors of  
epithelial growth factor receptor for treatment of tumor  
IN    Luo, Xiaomin; Li, Jian; Jiang, Hualiang; Shen, Xu; Liu, Hong; Shen,  
Jianhua; Zhu, Weiliang; Fu, Lili; Li, Lin; Mei, Changlin  
PA    Shanghai Institute of Materia Medica, Chinese Academy of Sciences, Peop.  
Rep. China  
SO    Faming Zhuanli Shenqing Gongkai Shuomingshu, 19pp.  
CODEN: CNXXEV  
DT    Patent  
LA    Chinese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	CN 1958572	A	20070509	CN 2005-10110045	20051104
PRAI	CN 2005-10110045		20051104		
OS	CASREACT 147:30962; MARPAT 147:30962				

=> D 16-20

L4    ANSWER 16 OF 299    CAPLUS    COPYRIGHT 2008 ACS on STN  
AN    2007:427291    CAPLUS  
DN    147:45189  
TI    High-throughput screening for small-molecule activators of neutrophils:  
identification of novel N-formyl peptide receptor agonists  
AU    Schepetkin, Igor A.; Kirpotina, Liliya N.; Khlebnikov, Andrei I.; Quinn,  
Mark T.  
CS    Department of Veterinary Molecular Biology, Montana State University,  
Bozeman, MT, USA  
SO    Molecular Pharmacology (2007), 71(4), 1061-1074  
CODEN: MOPMA3; ISSN: 0026-895X  
PB    American Society for Pharmacology and Experimental Therapeutics  
DT    Journal  
LA    English  
RE.CNT 39        THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:128762 CAPLUS  
 DN 146:350581  
 TI Structure-Based Pharmacophore Identification of New Chemical Scaffolds as  
 Non-Nucleoside Reverse Transcriptase Inhibitors  
 AU Barreca, Maria Letizia; De Luca, Laura; Iraci, Nunzio; Rao, Angela; Ferro,  
 Stefania; Maga, Giovanni; Chimirri, Alba  
 CS Dipartimento Farmaco-Chimico, Universita di Messina, Messina, 98168, Italy  
 SO Journal of Chemical Information and Modeling (2007), 47(2), 557-562  
 CODEN: JCISD8; ISSN: 1549-9596  
 PB American Chemical Society  
 DT Journal  
 LA English  
 RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:126145 CAPLUS  
 DN 146:379791  
 TI Atropisomeric 3-( $\beta$ -hydroxyethyl)-4-arylquinolin-2-ones as Maxi-K  
 Potassium Channel Openers  
 AU Vrudhula, Vivekananda M.; Dasgupta, Bireshwar; Qian-Cutrone, Jingfang;  
 Kozlowski, Edward S.; Boissard, Christopher G.; Dworetzky, Steven I.; Wu,  
 Dedong; Gao, Qi; Kimura, Roy; Gribkoff, Valentin K.; Starrett, John E.,  
 Jr.  
 CS Bristol-Myers Squibb Pharmaceutical Research Institute, Wallingford, CT,  
 06492, USA  
 SO Journal of Medicinal Chemistry (2007), 50(5), 1050-1057  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 146:379791  
 RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:61837 CAPLUS  
 DN 146:156236  
 TI Cellular cholesterol absorption modifiers, and their therapeutic use  
 IN Gardiner, Elisabeth M.; Duron, Sergio G.; Massari, Mark E.; Severance,  
 Daniel L.; Semple, Joseph E.  
 PA Kalypsys, Inc., USA  
 SO PCT Int. Appl., 300pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007008541	A2	20070118	WO 2006-US26242	20060705
	WO 2007008541	A3	20070726		
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	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,			

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA  
 PRAI US 2005-697659P P 20050708  
 US 2005-697686P P 20050708  
 US 2005-697814P P 20050708  
 US 2005-727646P P 20051017  
 US 2006-782303P P 20060313  
 OS MARPAT 146:156236

L4 ANSWER 20 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:53912 CAPLUS  
 DN 146:151898  
 TI Rewritable optical disks containing 1H-quinoxalin-2-one derivative  
 IN Miyazato, Masataka; Shiozaki, Hiroyuki; Ishida, Tsutomu; Ogiso, Akira  
 PA Mitsui Chemicals Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 47pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007008045	A	20070118	JP 2005-192588	20050630
PRAI	JP 2005-192588		20050630		
OS	MARPAT 146:151898				

=> D 21-25

L4 ANSWER 21 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1338413 CAPLUS  
 DN 146:81779  
 TI Preparation of quinolinones and analogs for the treatment of multi-drug  
 resistant bacterial infections  
 IN Breault, Gloria; Eyermann, Charles Joseph; Geng, Bolin; Morningstar,  
 Marshall; Reck, Folkert  
 PA Astrazeneca AB, Swed.; Astrazeneca UK Limited  
 SO PCT Int. Appl., 209pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006134378	A1	20061221	WO 2006-GB2207	20060616
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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AU	2006258879	A1	20061221	AU 2006-258879	20060616
CA	2610900	A1	20061221	CA 2006-2610900	20060616
EP	1893599	A1	20080305	EP 2006-744233	20060616
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,				



BA, HR, MK, YU

IN 2007DN09254	A	20080118	IN 2007-DN9254	20071130
KR 2008021031	A	20080306	KR 2007-729378	20071214
NO 2008000338	A	20080229	NO 2008-338	20080116
PRAI US 2005-691340P	P	20050616		
WO 2006-GB2207	W	20060616		

OS MARPAT 146:81779

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:1322867 CAPLUS  
DN 146:229152  
TI Trifluoroacetic acid: a more effective and efficient reagent for the  
synthesis of 3-arylmethylene-3,4-dihydro-1H-quinolin-2-ones and  
3-arylmethyl-2-aminoquinolines from Baylis-Hillman derivatives via Claisen  
rearrangement  
AU Pathak, Richa; Madapa, Sudharshan; Batra, Sanjay  
CS Medicinal and Process Chemistry Division, Central Drug Research Institute,  
Uttar Pradesh, 226001, India  
SO Tetrahedron (2006), Volume Date 2007, 63(2), 451-460  
CODEN: TETRAB; ISSN: 0040-4020  
PB Elsevier Ltd.  
DT Journal  
LA English  
OS CASREACT 146:229152  
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:1119240 CAPLUS  
DN 147:235239  
TI New syntheses of selenolo(2,3-b)quinoline-2-carboxylic ethyl esters  
AU Nithyadevi, V.; Rajendran, S. P.  
CS Department of Chemistry, Bharathiar University, India  
SO Phosphorus, Sulfur and Silicon and the Related Elements (2006), 181(11),  
2623-2634  
CODEN: PSSLEC; ISSN: 1042-6507  
PB Taylor & Francis, Inc.  
DT Journal  
LA English  
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:1041251 CAPLUS  
DN 145:369901  
TI Protein aggregation inhibitors and protein aggregate depolymerizing  
compounds for the treatment of neurodegenerative conditions  
IN Mandelkow, Eckhard; Mandelkow, Eva-Maria; Biernat, Jacek; Bergen, Martin  
Von; Pickhardt, Marcus  
PA Max-Planck-Gesellschaft Zur Forderung der Wissenschaften, e.v., Germany  
SO U.S. Pat. Appl. Publ., 71pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 20060223812	A1	20061005	US 2006-351884	20060210
	WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				

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 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
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 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,  
 CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS,  
 MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD,  
 RU, TJ, TM

PRAI WO 2004-EP8031 A2 20040717  
 US 2005-652284P P 20050211  
 OS MARPAT 145:369901

L4 ANSWER 25 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1010580 CAPLUS  
 DN 145:377217  
 TI Method for the preparation of phenyl-3-aminomethylquinol-2-one derivatives  
 of as inhibitors of NO-synthase, their biologically activity and  
 pharmaceutical composition based thereon  
 IN Kirpichenok, M. A.; Genis, D. V.; Rodin, O. G.; Solov'ev, A. N.; Kochubei,  
 V. S.; Fedotov, Y. A.; Afanas'ev, I. I.  
 PA OOO "Asinehks Medkhim", Russia  
 SO Russ., 34pp.  
 CODEN: RUXXE7  
 DT Patent  
 LA Russian  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	RU 2284325	C2	20060927	RU 2003-136378	20031217
PRAI	RU 2003-136378		20031217		
OS	CASREACT 145:377217; MARPAT 145:377217				

=> D 26-30

L4 ANSWER 26 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:999877 CAPLUS  
 DN 146:7921  
 TI Synthetic studies of bioactive quinoxalinones: A facile approach to potent  
 euglycemic and hypolipidemic agents  
 AU Kamila, Sukanta; Biehl, Edward R.  
 CS Southern Methodist University, Dallas, TX, USA  
 SO Heterocycles (2006), 68(9), 1931-1939  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PB Japan Institute of Heterocyclic Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 146:7921  
 RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:992284 CAPLUS  
 DN 146:194  
 TI Design, synthesis and antitumor evaluation of a new series of  
 N-substituted-thiourea derivatives  
 AU Li, Jian; Tan, Jin-zhi; Chen, Li-li; Zhang, Jian; Shen, Xu; Mei,  
 Chang-lin; Fu, Li-li; Lin, Li-ping; Ding, Jian; Xiong, Bing; Xiong,  
 Xi-shan; Liu, Hong; Luo, Xiao-min; Jiang, Hua-liang  
 CS Drug Discovery and Design Centre, State Key Laboratory of Drug Research,

Shanghai Institute of Materia Medica, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, 201203, Peop. Rep. China  
 SO Acta Pharmacologica Sinica (2006), 27(9), 1259-1271  
 CODEN: APSCG5; ISSN: 1671-4083  
 PB Blackwell Publishing Asia Pty Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 146:194  
 RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 28 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:830334 CAPLUS  
 DN 145:327681  
 TI Pharmacophore-based virtual screening: The discovery of novel methionyl-tRNA synthetase inhibitors  
 AU Kim, Su Yeon; Lee, Yeon-Sook; Kang, Taehee; Kim, Sunghoon; Lee, Jeewoo  
 CS Laboratory of Medicinal Chemistry, Research Institute of Pharmaceutical Sciences, College of Pharmacy, Seoul National University, Seoul, 151-742, S. Korea  
 SO Bioorganic & Medicinal Chemistry Letters (2006), 16(18), 4898-4907  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PB Elsevier B.V.  
 DT Journal  
 LA English  
 RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:800127 CAPLUS  
 DN 145:305641  
 TI CoMFA study on quinolones as novel inhibitors of HIV-1 reverse transcriptase  
 AU Yi, Ping; Qiu, Minghua  
 CS Laboratory of Phytochemistry, Kunming Institute of Botany, The Chinese Academy of Science, Kunming, 650204, Peop. Rep. China  
 SO Jisuanji Yu Yingyong Huaxue (2006), 23(5), 399-402  
 CODEN: JYYHE6; ISSN: 1001-4160  
 PB Jisuanji Yu Yingyong Huaxue Bianjibu  
 DT Journal  
 LA Chinese

L4 ANSWER 30 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:791062 CAPLUS  
 DN 145:230880  
 TI Preparation of novel ligands for the HisB10 Zn<sup>2+</sup> sites of the R-state insulin hexamer and their use in pharmaceutical preparations comprising insulin  
 IN Kaarsholm, Niels Christian; Birk Olsen, Helle; Madsen, Peter; Oestergaard, Soeren; Jakobsen, Palle; Moeller Tagmose, Tina  
 PA Novo Nordisk A/S, Den.  
 SO PCT Int. Appl., 424pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2006082245	A1	20060810	WO 2006-EP50675	20060206
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,				

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 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
 VN, YU, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

PRAI EP 2005-100835 A 20050207

OS MARPAT 145:230880

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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DD IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

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L4 ANSWER 24 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1041251 CAPLUS

DOCUMENT NUMBER: 145:369901

TITLE: Protein aggregation inhibitors and protein aggregate  
 depolymerizing compounds for the treatment of  
 neurodegenerative conditions

INVENTOR(S): Mandelkow, Eckhard; Mandelkow, Eva-Maria; Biernat,  
 Jacek; Bergen, Martin Von; Pickhardt, Marcus

PATENT ASSIGNEE(S): Max-Planck-Gesellschaft Zur Forderungder  
 Wissenschaften, e.v., Germany

SOURCE: U.S. Pat. Appl. Publ., 71pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

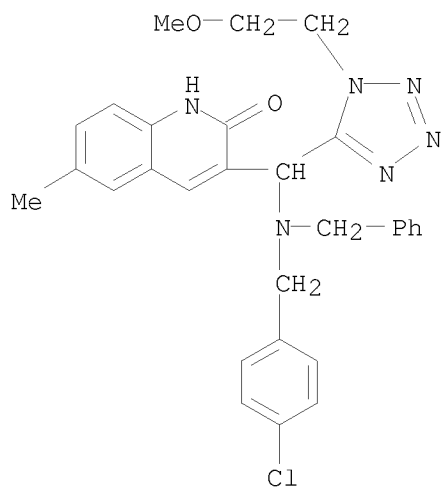
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060223812	A1	20061005	US 2006-351884	20060210
WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,			
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	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,			
	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,			
	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,			
	TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,			
	IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,			
	CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS,			
	MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD,			
	RU, TJ, TM			

PRIORITY APPLN. INFO.: WO 2004-EP8031 A2 20040717  
 US 2005-652284P P 20050211

OTHER SOURCE(S): MARPAT 145:369901

AB The invention discloses the use of compds. capable of inhibiting protein  
 aggregate formation and capable of depolyng. protein aggregates for the  
 preparation of a pharmaceutical composition for treating neurodegenerative  
 conditions, e.g. Alzheimer's disease.

IT 523984-58-9  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (protein aggregation inhibitors and protein aggregate depolymg. compds.  
 for treatment of neurodegenerative conditions)  
 RN 523984-58-9 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[[[(4-chlorophenyl)methyl](phenylmethyl)amino][1-(2-  
 methoxyethyl)-1H-tetrazol-5-yl)methyl]-6-methyl- (CA INDEX NAME)



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	ENTRY	SESSION
FULL ESTIMATED COST	52.31	231.34
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.80	-0.80

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 DICTIONARY FILE UPDATES: 7 MAY 2008 HIGHEST RN 1019993-29-3

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

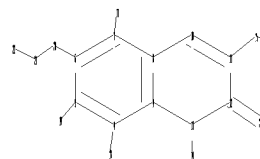
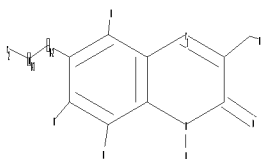
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 experimental property data in the original document. For information  
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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ring nodes :
4 5 6 7 8 9 10 11 12 13
chain bonds :
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ring bonds :
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exact/norm bonds :
4-18 5-19 6-20 7-17 8-10 9-13 10-11 11-12 11-15 12-13 12-27 13-14 15-16
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G1:C,N

G2:C,O,N

G3

Match level :

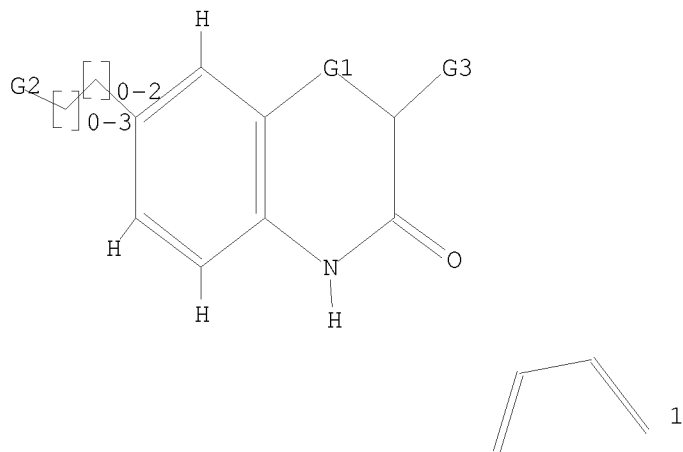
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14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 27:CLASS
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L5            STRUCTURE UPLOADED

=> D L5

L5 HAS NO ANSWERS

L5            STR



G1 C,N

G2 C,O,N

G3 Ak,Hy,[@1]

Structure attributes must be viewed using STN Express query preparation.

=> S L5

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SAMPLE SCREEN SEARCH COMPLETED - 50281 TO ITERATE

4.0% PROCESSED 2000 ITERATIONS

21 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 992237 TO 1019003

PROJECTED ANSWERS: 9181 TO 11937

L6            21 SEA SSS SAM L5

=> S L6 SSS FULL

FULL SEARCH INITIATED 09:58:22 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1011346 TO ITERATE

98.9% PROCESSED 1000000 ITERATIONS

11355 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.09

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1011346 TO 1011346

PROJECTED ANSWERS: 11355 TO 11804

L7 11355 SEA SSS FUL L5

=> D L4 31-35

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:N

=> FILE CAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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410.62

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

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FILE LAST UPDATED: 7 May 2008 (20080507/ED)

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=> D HIS

(FILE 'HOME' ENTERED AT 09:43:22 ON 08 MAY 2008)

FILE 'REGISTRY' ENTERED AT 09:43:41 ON 08 MAY 2008

L1 STRUCTURE UPLOADED

L2 50 S L1

L3 10264 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:44:37 ON 08 MAY 2008

L4 299 S L3

FILE 'REGISTRY' ENTERED AT 09:57:37 ON 08 MAY 2008

L5 STRUCTURE UPLOADED

L6 21 S L5

L7 11355 S L6 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:59:35 ON 08 MAY 2008

=> D L4 31-35

L4 ANSWER 31 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:693843 CAPLUS



DN 145:188698  
TI Design, synthesis, and biological evaluations of novel quinolones as HIV-1 non-nucleoside reverse transcriptase inhibitors  
AU Ellis, David; Kuhen, Kelli L.; Anaclerio, Beth; Wu, Baogen; Wolff, Karen; Yin, Hong; Bursulaya, Badry; Caldwell, Jeremy; Karanewsky, Donald; He, Yun  
CS Genomics Institute of the Novartis Research Foundation (GNF), San Diego, CA, 92121, USA  
SO Bioorganic & Medicinal Chemistry Letters (2006), 16(16), 4246-4251  
CODEN: BMCLE8; ISSN: 0960-894X  
PB Elsevier B.V.  
DT Journal  
LA English  
OS CASREACT 145:188698  
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 32 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:689592 CAPLUS  
DN 145:271677  
TI A convenient synthesis of 2-chlorobenzo[b][1,8]naphthyridines  
AU Vandana, J. Christobel; Ragunath, L.; Rajendran, S. P.  
CS Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (2006), 45B(6), 1564-1566  
CODEN: IJSBDB; ISSN: 0376-4699  
PB National Institute of Science Communication and Information Resources  
DT Journal  
LA English  
OS CASREACT 145:271677  
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:672263 CAPLUS  
DN 145:321978  
TI A study of the analytical behaviour of selected synthetic and naturally occurring quinolines using electrospray ionization ion trap mass spectrometry, liquid chromatography and gas chromatography and the construction of an appropriate database for quinoline characterization  
AU O'Donnell, F.; Ramachandran, V. N.; Smyth, W. F.; Hack, C. J.; Patton, E.  
CS School of Biomedical Sciences, University of Ulster Coleraine, Coleraine, Co. Derry, BT52 1SA, UK  
SO Analytica Chimica Acta (2006), 572(1), 63-76  
CODEN: ACACAM; ISSN: 0003-2670  
PB Elsevier B.V.  
DT Journal  
LA English  
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 34 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:583007 CAPLUS  
DN 145:210921  
TI An efficient synthesis of benzo[b][1,8]naphthyridine-3-carboxylic methyl esters  
AU Nithyadevi, V.; Rajendran, S. P.  
CS Department of Chemistry, Bharathiar University, Coimbatore, 641046, India  
SO Journal of Heterocyclic Chemistry (2006), 43(3), 755-758  
CODEN: JHTCAD; ISSN: 0022-152X  
PB HeteroCorporation  
DT Journal  
LA English

OS CASREACT 145:210921

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 35 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:207342 CAPLUS

DN 145:314438

TI Structural Elucidation Using <sup>1</sup>H-NMR, <sup>13</sup>C-NMR, and Mass Spectroscopic Study  
of 3-(Ethoxy-hydroxy-methyl)-quinolin-2(1H)-one and 2-Benzylloxy-3-  
formylquinoline

AU Dhanabal, T.; Suresh, T.; Mohan, P.

CS Department of Chemistry, Bharathiar University, Tamil Nadu, 641 046, India

SO Spectroscopy Letters (2006), 39(2), 117-126

CODEN: SPLEBX; ISSN: 0038-7010

PB Taylor & Francis, Inc.

DT Journal

LA English

OS CASREACT 145:314438

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L4 36-40

L4 ANSWER 36 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:77226 CAPLUS

DN 144:171019

TI Preparation of quinoxalinones as estrogen receptor ligands for treating  
various diseases

IN Mahaney, Paige Erin; Webb, Michael Byron; Ye, Fei; Sabatucci, Joseph Peter

PA Wyeth, USA

SO U.S. Pat. Appl. Publ., 21 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 20060019961	A1	20060126	US 2005-147489	20050608
	US 7351709	B2	20080401		
PRAI	US 2004-578179P	P	20040609		

OS MARPAT 144:171019

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 37 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:77202 CAPLUS

DN 144:170990

TI Preparation of benzimidazole derivatives as gonadotropin releasing hormone  
receptor antagonists

IN Garrick, Lloyd M.; Hauze, Diane B.; Kees, Kenneth L.; Lundquist Iv,  
Joseph, T.; Mann, Charles, W.; Mehlmann, John, F.; Pelletier, Jeffrey, C.;  
Rogers, John, F., Jr.; Wrobel, Jay, E.

PA Wyeth, John, and Brother Ltd., USA; Green, Daniel M.

SO PCT Int. Appl., 149 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2006009734	A1	20060126	WO 2005-US21124	20050616

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

AU 2005264996 A1 20060126 AU 2005-264996 20050616  
CA 2570968 A1 20060126 CA 2005-2570968 20050616  
US 20060019965 A1 20060126 US 2005-154795 20050616  
EP 1758895 A1 20070307 EP 2005-762686 20050616

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, LV

CN 101006078 A 20070725 CN 2005-80027480 20050616  
JP 2008503469 T 20080207 JP 2007-516680 20050616  
BR 2005012261 A 20080226 BR 2005-12261 20050616  
IN 2006KN03565 A 20070615 IN 2006-KN3565 20061128  
KR 2007027584 A 20070309 KR 2006-726441 20061215  
MX 2006PA14798 A 20070622 MX 2006-PA14798 20061215  
NO 2007000294 A 20070228 NO 2007-294 20070116

PRAI US 2004-580640P P 20040617  
WO 2005-US21124 W 20050616

OS MARPAT 144:170990

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 38 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:74852 CAPLUS  
DN 144:164276  
TI Treating neurodegenerative conditions  
IN Mandelkow, Eckard; Mandelkow, Eva-Maria; Biernat, Jacek; Bergen, Martin V.; Pickhardt, Markus  
PA Max Planck Gesellschaft zur Foerderung der Wissenschaft, Germany  
SO PCT Int. Appl., 136 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20060223812	A1	20061005	US 2006-351884	20060210
PRAI WO 2004-EP8031	A2	20040717		
US 2005-652284P	P	20050211		
OS MARPAT 144:164276				

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:54922 CAPLUS  
 DN 144:150646  
 TI Preparation of novel ligands with protamine extensions for the HisB10 Zn<sup>2+</sup> sites of the R-state insulin hexamer and their use in pharmaceutical preparations comprising insulin  
 IN Olsen, Helle Birk; Kaarsholm, Niels Christian; Madsen, Peter; Balschmidt, Per  
 PA Novo Nordisk A/S, Den.  
 SO PCT Int. Appl., 408 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006005683	A1	20060119	WO 2005-EP53070	20050629
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1768694	A1	20070404	EP 2005-758689	20050629
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	JP 2008505866	T	20080228	JP 2007-519777	20050629
PRAI	DK 2004-1091	A	20040709		
	WO 2005-EP53070	W	20050629		
OS	MARPAT 144:150646				

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:26228 CAPLUS  
 DN 144:128863  
 TI Derivatives of 3-aminomethylquinolone-2 as inhibitors of NO-synthetase and methods for their preparation and biologically active compounds and pharmaceutical composition based thereon  
 IN Kirpichenok, M. A.; Genis, D. V.; Rodin, O. G.; Solov'ev, A. N.; Kochubei, V. S.; Saekov, V. N.  
 PA Obshchestvo s Ogranichennoi Otvetstvennost'yu "Asineks Medkhim", Russia  
 SO Russ., 23 pp.  
 CODEN: RUXXE7  
 DT Patent  
 LA Russian  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	RU 2267485	C2	20060110	RU 2003-129723	20031007
	WO 2006054912	A1	20060526	WO 2004-RU457	20041118
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				

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 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE,  
 LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ,  
 MD, RU, TJ, TM

PRAI RU 2003-129723 A 20031007

=> FILE REG

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	ENTRY	SESSION
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.80

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 DICTIONARY FILE UPDATES: 7 MAY 2008 HIGHEST RN 1019993-29-3

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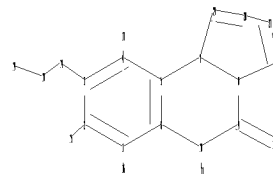
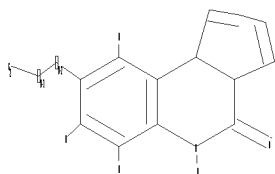
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 predicted properties as well as tags indicating availability of  
 experimental property data in the original document. For information  
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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chain nodes :
11 13 14 15 16 17 18 19
ring nodes :
1 2 3 4 5 6 7 8 9 10 26 27 28 29
chain bonds :
1-16 2-15 3-14 4-17 9-13 10-11 14-18 18-19
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 7-29 8-9 8-26 9-10 26-27 27-28
28-29
exact/norm bonds :
5-7 6-10 7-8 7-29 8-9 8-26 9-10 9-13 18-19 26-27 27-28 28-29
exact bonds :
1-16 2-15 3-14 4-17 10-11 14-18
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

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G1:C,N

G2:C,O,N

G3:Ak

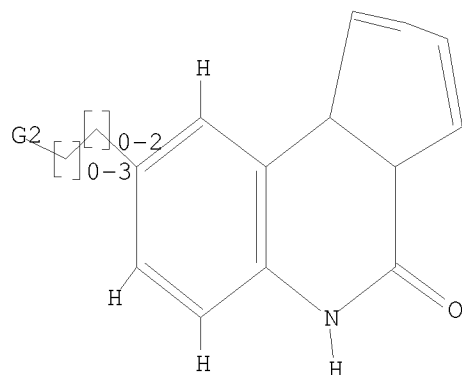
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26:Atom 27:Atom 28:Atom 29:Atom

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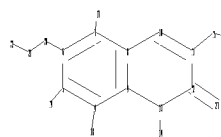
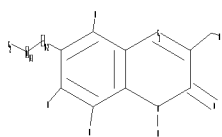
=> D L8  
 L8 HAS NO ANSWERS  
 L8 STR



G1 C,N  
 G2 C,O,N  
 G3 Ak

Structure attributes must be viewed using STN Express query preparation.

=>  
 Uploading C:\Program Files\Stnexp\Queries\10596086.str



chain nodes :  
 14 15 16 17 18 19 20 21 22 27  
 ring nodes :  
 4 5 6 7 8 9 10 11 12 13

chain bonds :  
 4-18 5-19 6-20 7-17 11-15 12-27 13-14 15-16 20-21 21-22  
 ring bonds :  
 4-5 4-9 5-6 6-7 7-8 8-9 8-10 9-13 10-11 11-12 12-13  
 exact/norm bonds :  
 4-18 5-19 6-20 7-17 8-10 9-13 10-11 11-12 11-15 12-13 12-27 13-14 15-16  
 20-21 21-22  
 normalized bonds :  
 4-5 4-9 5-6 6-7 7-8 8-9

G1:C,N

G2:C,O,N

G3

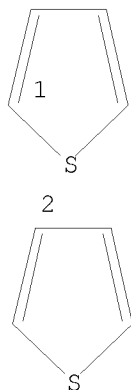
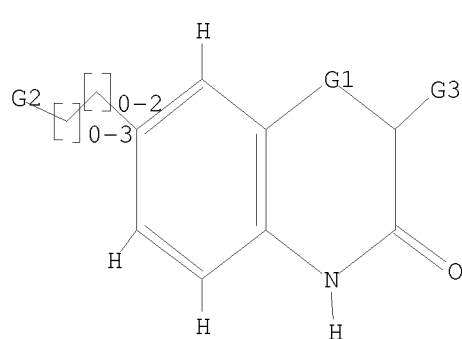
Match level :  
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 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS  
 22:CLASS 27:CLASS

L9 STRUCTURE UPLOADED

=> D L9

L9 HAS NO ANSWERS

L9 STR



G1 C,N

G2 C,O,N

G3 Ak,[@1],[@2]

Structure attributes must be viewed using STN Express query preparation.

=> S L8

SAMPLE SEARCH INITIATED 10:04:48 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 10615 TO ITERATE

18.8% PROCESSED 2000 ITERATIONS  
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
 SEARCH TIME: 00.00.01

0 ANSWERS



FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 206126 TO 218474  
PROJECTED ANSWERS: 0 TO 0

L10 0 SEA SSS SAM L8

=> S L8 SSS FULL  
FULL SEARCH INITIATED 10:04:55 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 213246 TO ITERATE

100.0% PROCESSED 213246 ITERATIONS 105 ANSWERS  
SEARCH TIME: 00.00.01

L11 105 SEA SSS FUL L8

=> S L9  
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SAMPLE SCREEN SEARCH COMPLETED - 50281 TO ITERATE

4.0% PROCESSED 2000 ITERATIONS 21 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 992237 TO 1019003  
PROJECTED ANSWERS: 9181 TO 11937

L12 21 SEA SSS SAM L9

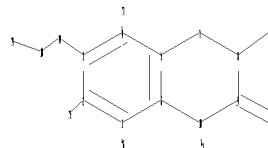
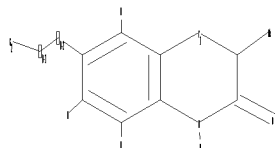
=> S L9 SSS FULL  
FULL SEARCH INITIATED 10:05:09 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1011346 TO ITERATE

98.9% PROCESSED 1000000 ITERATIONS 10576 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.10

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 1011346 TO 1011346  
PROJECTED ANSWERS: 10576 TO 11005

L13 10576 SEA SSS FUL L9

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chain nodes :
11 13 14 15 16 17 18 19 26
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
1-16 2-15 3-14 4-17 8-26 9-13 10-11 14-18 18-19
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10
exact/norm bonds :
1-16 2-15 3-14 4-17 5-7 6-10 7-8 8-9 8-26 9-10 9-13 10-11 14-18 18-19
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

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G1:C,N

G2:C,O,N

G3

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS
26:CLASS

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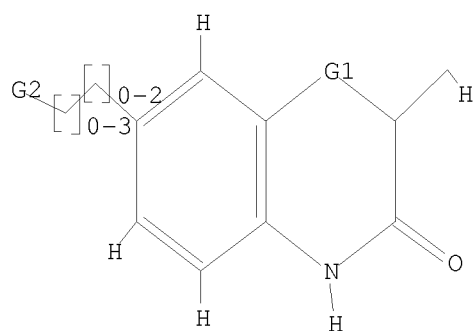
L14 STRUCTURE UPLOADED

=> D L14

L14 HAS NO ANSWERS

L14

STR



G1 C,N

G2 C,O,N

G3

Structure attributes must be viewed using STN Express query preparation.

=> S L14

SAMPLE SEARCH INITIATED 10:08:59 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 11058 TO ITERATE

18.1% PROCESSED 2000 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 214858 TO 227462

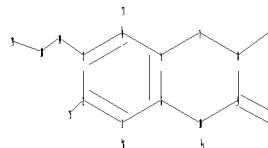
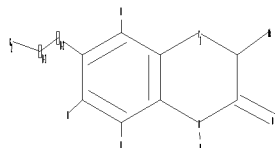
PROJECTED ANSWERS: 9337 TO 12115

L15

50 SEA SSS SAM L14

=>

Uploading C:\Program Files\Stnexp\Queries\10596086-3.str



```

chain nodes :
11 13 14 15 16 17 18 19 26
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
1-16 2-15 3-14 4-17 8-26 9-13 10-11 14-18 18-19
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10
exact/norm bonds :
1-16 2-15 3-14 4-17 5-7 6-10 7-8 8-9 8-26 9-10 9-13 10-11 14-18 18-19
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

```

G1:C,N

G2:C,O,N

G3

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS
26:CLASS

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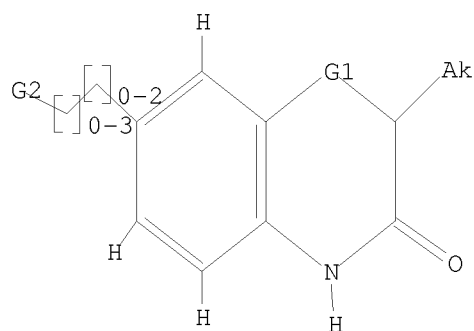
L16 STRUCTURE UPLOADED

=> D L16

L16 HAS NO ANSWERS

L16

STR



G1 C,N

G2 C,O,N

G3

Structure attributes must be viewed using STN Express query preparation.

=> S L16

SAMPLE SEARCH INITIATED 10:10:41 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 50281 TO ITERATE

4.0% PROCESSED 2000 ITERATIONS

21 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 992237 TO 1019003

PROJECTED ANSWERS: 9181 TO 11937

L17 21 SEA SSS SAM L16

=> S L16 SSS FULL

FULL SEARCH INITIATED 10:11:12 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1011346 TO ITERATE

98.9% PROCESSED 1000000 ITERATIONS

10559 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.09

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*COMPLETE\*\*

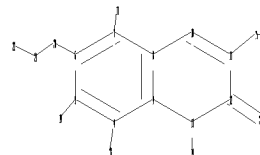
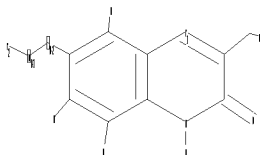
PROJECTED ITERATIONS: 1011346 TO 1011346

PROJECTED ANSWERS: 10559 TO 10987

L18 10559 SEA SSS FUL L16

=>

Uploading C:\Program Files\Stnexp\Queries\10596086.str



```

chain nodes :
14 15 16 17 18 19 20 21 22 27
ring nodes :
4 5 6 7 8 9 10 11 12 13
chain bonds :
4-18 5-19 6-20 7-17 11-15 12-27 13-14 15-16 20-21 21-22
ring bonds :
4-5 4-9 5-6 6-7 7-8 8-9 8-10 9-13 10-11 11-12 12-13
exact/norm bonds :
4-18 5-19 6-20 7-17 8-10 9-13 10-11 11-12 11-15 12-13 12-27 13-14 15-16
20-21 21-22
normalized bonds :
4-5 4-9 5-6 6-7 7-8 8-9

```

G1:C,N

G2:C,O,N

G3

Match level :

```

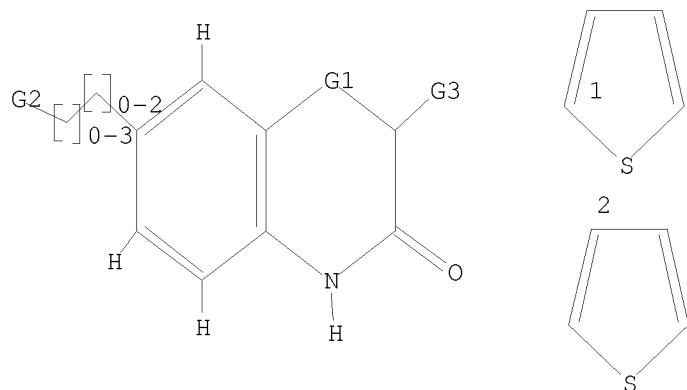
4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom
14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 27:CLASS

```

L19 STRUCTURE UPLOADED

=> D L19

L19 HAS NO ANSWERS  
L19 STR



G1 C,N  
G2 C,O,N  
G3 [@1],[@2]

Structure attributes must be viewed using STN Express query preparation.

=> S L19

SAMPLE SEARCH INITIATED 10:12:58 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 88 TO ITERATE

100.0% PROCESSED 88 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 1198 TO 2322  
PROJECTED ANSWERS: 1 TO 80

L20 1 SEA SSS SAM L19

=> S L19 SSS FULL

FULL SEARCH INITIATED 10:13:06 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1728 TO ITERATE

100.0% PROCESSED 1728 ITERATIONS 12 ANSWERS  
SEARCH TIME: 00.00.01

L21 12 SEA SSS FUL L19

=> D HIS

(FILE 'HOME' ENTERED AT 09:43:22 ON 08 MAY 2008)

FILE 'REGISTRY' ENTERED AT 09:43:41 ON 08 MAY 2008

L1 STRUCTURE UPLOADED

L2 50 S L1

L3 10264 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:44:37 ON 08 MAY 2008

L4 299 S L3

FILE 'REGISTRY' ENTERED AT 09:57:37 ON 08 MAY 2008  
L5               STRUCTURE UPLOADED  
L6               21 S L5  
L7               11355 S L6 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:59:35 ON 08 MAY 2008

FILE 'REGISTRY' ENTERED AT 10:04:01 ON 08 MAY 2008  
L8               STRUCTURE UPLOADED  
L9               STRUCTURE UPLOADED  
L10              0 S L8  
L11              105 S L8 SSS FULL  
L12              21 S L9  
L13              10576 S L9 SSS FULL  
L14              STRUCTURE UPLOADED  
L15              50 S L14  
L16              STRUCTURE UPLOADED  
L17              21 S L16  
L18              10559 S L16 SSS FULL  
L19              STRUCTURE UPLOADED  
L20              1 S L19  
L21              12 S L19 SSS FULL

=> S L21 OR L18 OR L11  
L22              10676 L21 OR L18 OR L11

=> FILE CAPLUS  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
718.96	1145.04

FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-0.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  
CA SUBSCRIBER PRICE

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FILE COVERS 1907 - 8 May 2008 VOL 148 ISS 19  
FILE LAST UPDATED: 7 May 2008 (20080507/ED)

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=> S L22  
L23              551 L22



=> D L4 38 IBIB ABS HITSTR

L4 ANSWER 38 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:74852 CAPLUS  
DOCUMENT NUMBER: 144:164276  
TITLE: Treating neurodegenerative conditions  
INVENTOR(S): Mandelkow, Eckard; Mandelkow, Eva-Maria; Biernat, Jacek; Bergen, Martin V.; Pickhardt, Markus  
PATENT ASSIGNEE(S): Max Planck Gesellschaft zur Foerderung der Wissenschaft, Germany  
SOURCE: PCT Int. Appl., 136 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20060223812	A1	20061005	US 2006-351884	20060210
PRIORITY APPLN. INFO.:			WO 2004-EP8031	A2 20040717
			US 2005-652284P	P 20050211

OTHER SOURCE(S): MARPAT 144:164276

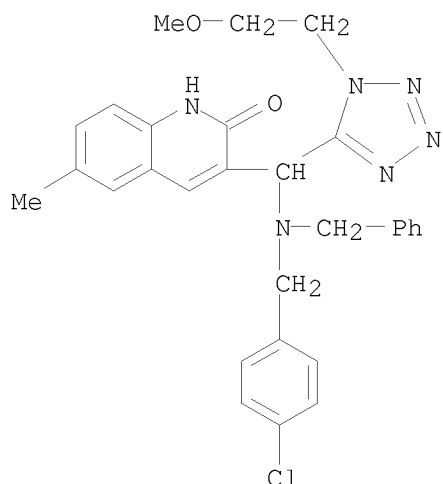
AB The present invention relates to the use of compds. capable of inhibiting protein aggregate formation and capable of depolymg. protein aggregates for the preparation of a pharmaceutical composition for treating neurodegenerative conditions such as Alzheimer disease.

IT 523984-58-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compds. to treat neurodegenerative conditions)

RN 523984-58-9 CAPLUS

CN 2(1H)-Quinolinone, 3-[[[(4-chlorophenyl)methyl](phenylmethyl)amino][1-(2-methoxyethyl)-1H-tetrazol-5-yl]methyl]-6-methyl- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L4 41-45

L4 ANSWER 41 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:1273698 CAPLUS  
 DN 144:254021  
 TI Synthesis, characterization and antimicrobial activities of fused  
 1,6-naphthyridines  
 AU Suresh, T.; Dhanabal, T.; Kumar, R. Nandha; Mohan, P. S.  
 CS Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including  
 Medicinal Chemistry (2005), 44B(11), 2375-2379  
 CODEN: IJSBDB; ISSN: 0376-4699  
 PB National Institute of Science Communication and Information Resources  
 DT Journal  
 LA English  
 OS CASREACT 144:254021  
 RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:1225850 CAPLUS  
 DN 144:88253  
 TI Synthesis of substituted 1,3-dimethyl-1H-quinoxalin-2-ones from aniline  
 derivatives  
 AU Li, Xun; Wang, Donghua; Wu, Jifeng; Xu, Wenfang  
 CS College of Pharmacy, Shandong University, Jinan, 250012, Peop. Rep. China  
 SO Heterocycles (2005), 65(11), 2741-2751  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PB Japan Institute of Heterocyclic Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 144:88253  
 RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 43 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:1077191 CAPLUS  
 DN 143:379513

TI Effect of 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)-quinolin-2(1H)-one (BMS-223131), a novel opener of large conductance Ca<sup>2+</sup>-activated K<sup>+</sup> (maxi-K) channels on normal and stress-aggravated colonic motility and visceral nociception. [Erratum to document cited in CA143:071440]  
AU Sivarao, Digavalli V.; Newberry, Kimberly; Langdon, Shaun; Lee, Alicia V.; Hewawasam, Plyasena; Plym, Mary Jane; Signor, Laura; Myers, Robert; Lodge, Nicholas J.  
CS Neuroscience Drug Discovery, Pharmaceutical Research Institute, Bristol Myers Squibb Co., Wallingford, CT, USA  
SO Journal of Pharmacology and Experimental Therapeutics (2005), 315(1), 476  
CODEN: JPETAB; ISSN: 0022-3565  
PB American Society for Pharmacology and Experimental Therapeutics  
DT Journal  
LA English

L4 ANSWER 44 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1011081 CAPLUS  
DN 143:440373

TI Reaction of some furan-2,3-diones with various 1,2-phenylenediamines  
AU Saripinar, Emin; Saglam, Ertugrul Gazi; Oncel, Ibrahim; Ilhan, Ilhan Ozer; Goktas, Lale; Kok, Tevfik Riza; Akcamur, Yunus  
CS Department of Chemistry, Arts and Sciences Faculty, Erciyes University, Kayseri, 38039, Turk.  
SO Heterocycles (2005), 65(9), 2161-2167  
CODEN: HTCYAM; ISSN: 0385-5414  
PB Japan Institute of Heterocyclic Chemistry  
DT Journal  
LA English  
OS CASREACT 143:440373  
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 45 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1010091 CAPLUS  
DN 144:467988  
TI Schiff Bases Derived from 6-Amino-2H-chromen-2-one. Synthesis and 1H NMR Spectra  
AU Ganushchak, N. I.; Kobrin, L. O.; Bilaya, E. E.; Mizyuk, V. L.  
CS Ivan Franko Lviv National University, Lvov, 79005, Ukraine  
SO Russian Journal of Organic Chemistry (2005), 41(7), 1064-1070  
CODEN: RJOCEQ; ISSN: 1070-4280  
PB Pleiades Publishing, Inc.  
DT Journal  
LA English  
OS CASREACT 144:467988  
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L4 46-50

L4 ANSWER 46 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1007164 CAPLUS  
DN 143:440372  
TI Novel approach to 3-methyl-1H-quinoxalin-2-ones  
AU Li, Xun; Wang, Donghua; Wu, Jifeng; Xu, Wenfang  
CS School of Pharmacy, Shandong University, Ji'nan, Peop. Rep. China  
SO Synthetic Communications (2005), 35(19), 2553-2560  
CODEN: SYNCAV; ISSN: 0039-7911  
PB Taylor & Francis, Inc.  
DT Journal

LA English  
OS CASREACT 143:440372  
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:921427 CAPLUS  
DN 143:241376  
TI Analogs of a potent maxi-K potassium channel opener with an improved  
inhibitory profile toward cytochrome P450 isozymes  
AU Vrudhula, Vivekananda M.; Dasgupta, Bireswar; Boissard, Christopher G.;  
Gribkoff, Valentin K.; Santone, Kenneth S.; Dalterio, Richard A.; Lodge,  
Nicholas J.; Starrett, John E.  
CS Bristol-Myers Squibb Pharmaceutical Research Institute, Wallingford, CT,  
06492, USA  
SO Bioorganic & Medicinal Chemistry Letters (2005), 15(19), 4286-4290  
CODEN: BMCLE8; ISSN: 0960-894X  
PB Elsevier B.V.  
DT Journal  
LA English  
OS CASREACT 143:241376  
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 48 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:638875 CAPLUS  
DN 143:153404  
TI Preparation of N-substituted piperidine and piperazine derivatives  
dopamine D2 and serotonin 2A receptor antagonists  
IN Cho, Stephen Sung Yong; Gregory, Tracy Fay; Guzzo, Peter Robert; Howard,  
Harry Ralph, Jr.; Nikam, Sham Shridhar; Surman, Matthew David; Walters,  
Michael Anthony  
PA Warner-Lambert Company Llc., USA  
SO PCT Int. Appl., 144 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005066165	A1	20050721	WO 2004-IB4239	20041220
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				
	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				
	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				
	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				
	TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,				
	AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,				
	EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,				
	RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,				
	MR, NE, SN, TD, TG				
	CA 2551346	A1	20050721	CA 2004-2551346	20041220
	EP 1701954	A1	20060920	EP 2004-806416	20041220
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
	BR 2004018255	A	20070417	BR 2004-18255	20041220
	JP 2007517014	T	20070628	JP 2006-546393	20041220
	MX 2006PA07654	A	20060904	MX 2006-PA7654	20060630
PRAI	US 2003-533761P	P	20031231		
	WO 2004-IB4239	W	20041220		
OS	MARPAT 143:153404				

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 49 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:635973 CAPLUS  
DN 143:286315  
TI Synthesis of pyrrolo[3,4-c]quinolines by 1,5-electrocyclisation of  
non-stabilized azomethine ylides  
AU Nyerges, Miklos; Pinter, Aron; Viranyi, Andrea; Blasko, Gabor; Toke,  
Laszlo  
CS Department of Organic Chemical Technology, Research Group of the Hungarian  
Academy of Sciences, Technical University of Budapest, Budapest, H-1521,  
Hung.  
SO Tetrahedron (2005), 61(34), 8199-8205  
CODEN: TETRAB; ISSN: 0040-4020  
PB Elsevier B.V.  
DT Journal  
LA English  
OS CASREACT 143:286315

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

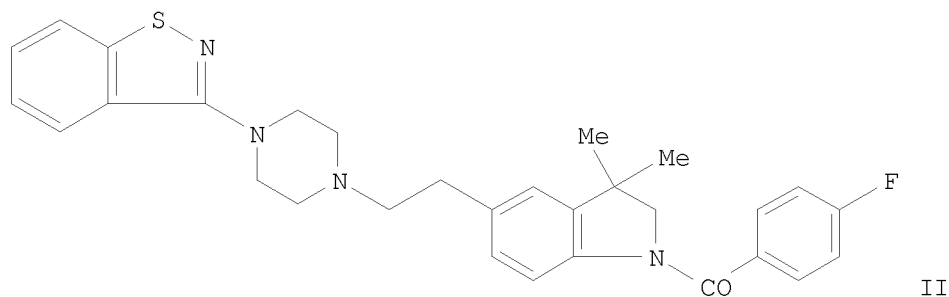
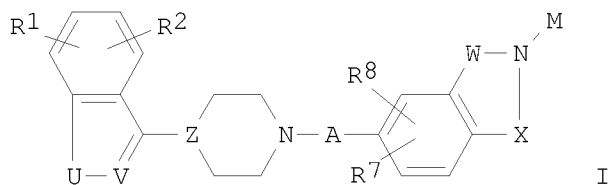
L4 ANSWER 50 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:623965 CAPLUS  
DN 144:412337  
TI Synthesis of Selenolo(2,3-b)quinoline-2-carboxylic Ethyl Esters:  
Cytogenetic Studies on Human Peripheral Blood Leucocyte Cultures, and  
Anti-Bacterial Studies, and Anti-Fungal Studies of Their Effects  
AU Nithyadevi, V.; Rajendran, S.  
CS Department of Chemistry, Bharathiar University, Tamil Nadu, Coimbatore,  
India  
SO Phosphorus, Sulfur and Silicon and the Related Elements (2005), 180(8),  
1849-1862  
CODEN: PSSLEC; ISSN: 1042-6507  
PB Taylor & Francis, Inc.  
DT Journal  
LA English  
OS CASREACT 144:412337

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L4 48 IBIB ABS HITSTR

L4 ANSWER 48 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2005:638875 CAPLUS  
DOCUMENT NUMBER: 143:153404  
TITLE: Preparation of N-substituted piperidine and piperazine  
derivatives dopamine D2 and serotonin 2A receptor  
antagonists  
INVENTOR(S): Cho, Stephen Sung Yong; Gregory, Tracy Fay; Guzzo,  
Peter Robert; Howard, Harry Ralph, Jr.; Nikam, Sham  
Shridhar; Surman, Matthew David; Walters, Michael  
Anthony  
PATENT ASSIGNEE(S): Warner-Lambert Company Llc., USA  
SOURCE: PCT Int. Appl., 144 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005066165	A1	20050721	WO 2004-IB4239	20041220
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2551346	A1	20050721	CA 2004-2551346	20041220
EP 1701954	A1	20060920	EP 2004-806416	20041220
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
BR 2004018255	A	20070417	BR 2004-18255	20041220
JP 2007517014	T	20070628	JP 2006-546393	20041220
MX 2006PA07654	A	20060904	MX 2006-PA7654	20060630
PRIORITY APPLN. INFO.:			US 2003-533761P	P 20031231
			WO 2004-IB4239	W 20041220
OTHER SOURCE(S):	MARPAT 143:153404			
GI				



AB This invention relates to N-substituted piperidine and piperazine derivs. (shown as I; variables defined below; e.g. [5-[2-[4-(benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3,3-dimethyl-2,3-dihydroindol-1-yl] (4-fluorophenyl)methanone (shown as II)), pharmaceutical compns. containing them and their use in the treatment of central nervous system and other disorders. Although the methods of preparation are not claimed, example preps. and/or characterization data for .apprx.160 I are included. For example, II was prepared in 98 % yield by coupling 3-[4-[2-(3,3-dimethyl-2,3-dihydro-1H-indol-5-yl)ethyl]piperazin-1-yl]benzo[d]isothiazole with 4-fluorobenzoyl chloride; the benzo[d]isothiazole reactant was prepared in 79 % yield by reduction of 5-[2-[4-(benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3,3-dimethyl-1,3-dihydroindol-2-one, which was prepared in 96 % yield from 3-(piperazin-1-yl)benzo[d]isothiazole and 5-(2-chloroethyl)-3,3-dimethyl-1,3-dihydroindol-2-one, which was prepared in 45 % yield by reduction

of 5-(2-chloroethyl)-3,3-dimethyl-1,3-dihydroindol-2-one, which was prepared in >96 % yield from chloroacetyl chloride and 3,3-dimethyl-1,3-dihydroindol-2-one. For I: M = E-R9, L-T-R9, T-D-R9; U is S, O, SO, SO2, CH2 or NR3; V is N or C; Z is N or C; A is -(CH2)mO-, -(CH2)mNR4-, or -(CH2)mC(R5R6)-, wherein R5 and R6 = H, (C1-C4) alkyl (un)substituted with 1-3 F atoms, (C1-C4) alkoxy (un)substituted with 1-3 F atoms, hydroxy, and aminoalkyl; or R5 and R6 together form a carbonyl, and wherein m = 1-4. R1 and R2 = H, (C1-C4) alkyl (un)substituted with 1-3 F atoms, (C1-4) alkoxy (un)substituted with 1-3 F atoms, halogen, nitro, cyano, amino, (C1-C4) alkylamino and di(C1-C4) alkylamino; R3 and R4 = H, (C1-C4) alkyl (un)substituted with 1-3 F atoms and (C1-C4) alkoxy (un)substituted with 1-3 F atoms; or, when U is NR3, one of R1 and R2 can form, together with the C to which it is attached, and together with R3 and the N to which it is attached, a heterocyclic ring containing 4-7 ring members of which 1-3 ring members can be N, O and S, and of which the remaining ring members are C, with the proviso that when R3 forms a ring with one of R1 and R2, the other of R1 and R2 is absent. X is -[C(R11)(R12)]o-, wherein R11 and R12 = H and (C1-C4) alkyl (un)substituted with 1-3 F atoms, and wherein o = 0-3, with the proviso that when W is absent, o ≥ 2; W is -[C(R13)(R14)]p-, wherein R13 and R14 = H and (C1-C4) alkyl (un)substituted with 1-3 F atoms, and wherein p = 0-4, with the proviso that when X is absent, p ≥ 2; R7 and R8 = halo, R1 and -OR1; or R7, when attached to a C adjacent to one of the C atoms shared by both the Ph ring to which R7 is attached and the ring containing W, N and X, forms, together with a C atom of X or a C atom of W, a saturated carbocyclic ring containing 3-6 C atoms. R9 = Ph, phenoxy, benzyloxy, and phenylamino, wherein the Ph moieties are (un)substituted with 1-3 halo, (C1-C3) alkyl (un)substituted with 1-3 F atoms, (C1-C3) alkoxy (un)substituted with 1-3 F atoms, nitro, cyano, amino, and (C1-C3) alkylamino; or R9 is a pyrrolidine, piperidine or morpholine ring wherein the point of attachment to D, T or E is the ring N, and wherein said pyrrolidine, piperidine or morpholine ring can be (un)substituted with 1 or 2 Me, amino, (C1-04) alkylamino, and di(C1-C4) alkylamino; or R9 is a furan, thiophene, or pyrazole ring (un)substituted with 1-2 (C1-C4) alkyl groups; or R9 is (C1-C6) straight or branched alkyl or (C3-C6) cycloalkyl, wherein said straight, branched and cyclic alkyl moieties are be (un)substituted with 1-3 halo atoms or (C1-C4) alkoxy (un)substituted with 1-3 F atoms; or R9 is halogen, nitro, cyano, amino, (C1-C4) alkylamino, di(C1-C4) alkylamino or OR1, wherein the alkyl moieties of (C1-C4) alkylamino and di(C1-C4) alkylamino are (un)substituted with an amino, (C1-C4) alkylamino, or di(C1-C4) alkylamino group; E is -C(O)-, -S(O)- or -SO2-; T is -C(O)- or -CO2-; L is -(CH2)n wherein n = 0-3; D is -(CHR10)q-, wherein q = 1-3, or NR10; R10 is H or straight or branched (C1-C3) alkyl.

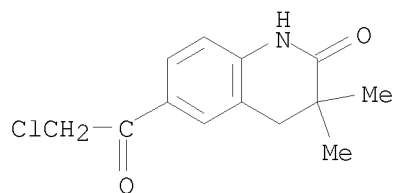
IT 133998-80-8P, 6-(2-Chloroacetyl)-3,3-dimethyl-3,4-dihydro-1H-quinolin-2-one 133998-94-4P, 6-(2-Chloroethyl)-3,3-dimethyl-3,4-dihydro-1H-quinolin-2-one

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

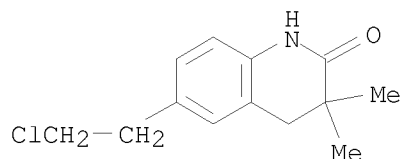
(preparation of N-substituted piperidine and piperazine derivs. dopamine D2 and serotonin 2A receptor antagonists)

RN 133998-80-8 CAPLUS

CN 2(1H)-Quinolinone, 6-(chloroacetyl)-3,4-dihydro-3,3-dimethyl- (9CI) (CA INDEX NAME)

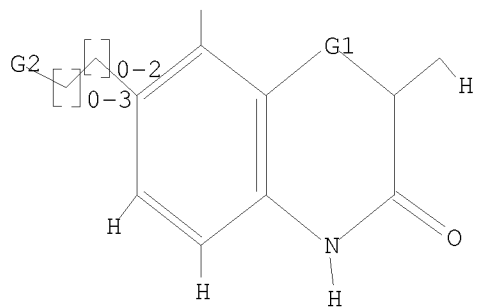


RN 133998-94-4 CAPLUS  
 CN 2(1H)-Quinolinone, 6-(2-chloroethyl)-3,4-dihydro-3,3-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L1  
 L1 HAS NO ANSWERS  
 L1 STR

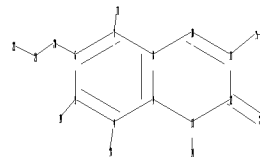
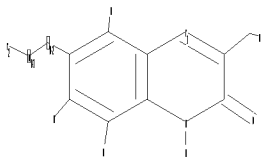


G1 C,N  
 G2 C,O,N

Structure attributes must be viewed using STN Express query preparation.

=>  
 Uploading C:\Program Files\Stnexp\Queries\10596086.str





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chain nodes :
14 15 16 17 18 19 20 21 22 27
ring nodes :
4 5 6 7 8 9 10 11 12 13
chain bonds :
4-18 5-19 6-20 7-17 11-15 12-27 13-14 15-16 20-21 21-22
ring bonds :
4-5 4-9 5-6 6-7 7-8 8-9 8-10 9-13 10-11 11-12 12-13
exact/norm bonds :
4-18 5-19 6-20 7-17 8-10 9-13 10-11 11-12 11-15 12-13 12-27 13-14 15-16
20-21 21-22
normalized bonds :
4-5 4-9 5-6 6-7 7-8 8-9

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G1:C,N

G2:C,O,N

G3

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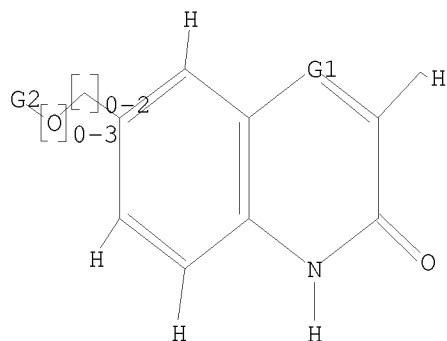
Match level :
4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom
14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 27:CLASS

```

L24 STRUCTURE UPLOADED

=> D L24

L24 HAS NO ANSWERS  
L24 STR



G1 C,N  
G2 C,O,N  
G3

Structure attributes must be viewed using STN Express query preparation.

=> S L24  
REGISTRY INITIATED  
Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 10:21:28 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 11058 TO ITERATE

18.1% PROCESSED 2000 ITERATIONS 50 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 214858 TO 227462  
PROJECTED ANSWERS: 8717 TO 11407

L25 50 SEA SSS SAM L24

L26 2 L25

=> S L24 SSS FULL  
REGISTRY INITIATED  
Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 10:21:41 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 220811 TO ITERATE

100.0% PROCESSED 220811 ITERATIONS  
SEARCH TIME: 00.00.01

9835 ANSWERS

L27 9835 SEA SSS FUL L24

L28 231 L27

=> S L24 NOT L28

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 10:22:00 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 11058 TO ITERATE

18.1% PROCESSED 2000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

50 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 214858 TO 227462

PROJECTED ANSWERS: 8717 TO 11407

L29 50 SEA SSS SAM L24

L30 2 L29

L31 0 L30 NOT L28

=> S L4 NOT L28

L32 68 L4 NOT L28

=> S L32 OR L28

L33 299 L32 OR L28

=> D L32 1-5

L32 ANSWER 1 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:1411046 CAPLUS

DN 148:214976

TI Rearrangement of furo[2,3-c]quinoline-2,4(3aH,5H)-diones to  
furo[3,4-c]quinoline-3,4(1H,5H)-diones

AU Kafka, Stanislav; Kosmrlj, Janez; Klasek, Antonin; Pevec, Andrej

CS Faculty of Technology, Tomas Bata University in Zlin, Zlin, 762 72, Czech  
Rep.

SO Tetrahedron Letters (2007), Volume Date 2008, 49(1), 90-93

CODEN: TELEAY; ISSN: 0040-4039

PB Elsevier Ltd.

DT Journal

LA English

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 2 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:969605 CAPLUS  
DN 147:323004  
TI Preparation of pyrimidine-2,4-diamines for inhibition of the JAK pathway  
IN Argade, Ankush; Sran, Arvinder; Carroll, David; Clough, Jeffrey; Tso, Kin;  
Bhamidipati, Somasekhar; Thota, Sambaiah; Singh, Rajinder; Taylor,  
Vanessa; Li, Hui; Masuda, Esteban  
PA Rigel Pharmaceuticals, Inc., USA  
SO U.S. Pat. Appl. Publ., 106pp., Cont.-in-part of U.S. Ser. No. 450,901.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070203161	A1	20070830	US 2007-678429	20070223
	US 20060293311	A1	20061228	US 2006-450901	20060608
PRAI	US 2006-776636P	P	20060224		
	US 2006-450901	A2	20060608		
	US 2006-871098P	P	20061220		
	US 2005-689032P	P	20050608		
	US 2005-706638P	P	20050808		
OS	MARPAT 147:323004				

L32 ANSWER 3 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:874181 CAPLUS  
DN 147:257784  
TI Preparation of benzoxazines and related nitrogen-containing heterobicyclic  
compounds as mineralocorticoid receptor modulators.  
IN Iijima, Toru; Yamamoto, Yasuo; Akatsuka, Hidenori; Kawaguchi, Takayuki  
PA Tanabe Seiyaku Co., Ltd., Japan  
SO PCT Int. Appl., 140pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007089034	A1	20070809	WO 2007-JP52165	20070201
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI	JP 2006-25403	A	20060202		
	JP 2006-275917	A	20061010		
OS	MARPAT 147:257784				

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 4 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:53912 CAPLUS

DN 146:151898  
TI Rewritable optical disks containing 1H-quinoxalin-2-one derivative  
IN Miyazato, Masataka; Shiozaki, Hiroyuki; Ishida, Tsutomu; Ogiso, Akira  
PA Mitsui Chemicals Inc., Japan  
SO Jpn. Kokai Tokkyo Koho, 47pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2007008045	A	20070118	JP 2005-192588	20050630
PRAI	JP 2005-192588		20050630		
OS	MARPAT 146:151898				

L32 ANSWER 5 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:999877 CAPLUS

DN 146:7921

TI Synthetic studies of bioactive quinoxalinones: A facile approach to potent euglycemic and hypolipidemic agents

AU Kamila, Sukanta; Biehl, Edward R.

CS Southern Methodist University, Dallas, TX, USA

SO Heterocycles (2006), 68(9), 1931-1939

CODEN: HTCYAM; ISSN: 0385-5414

PB Japan Institute of Heterocyclic Chemistry

DT Journal

LA English

OS CASREACT 146:7921

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L32 6-10

L32 ANSWER 6 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:693843 CAPLUS

DN 145:188698

TI Design, synthesis, and biological evaluations of novel quinolones as HIV-1 non-nucleoside reverse transcriptase inhibitors

AU Ellis, David; Kuhen, Kelli L.; Anaclerio, Beth; Wu, Baogen; Wolff, Karen; Yin, Hong; Bursulaya, Badry; Caldwell, Jeremy; Karanewsky, Donald; He, Yun  
CS Genomics Institute of the Novartis Research Foundation (GNF), San Diego, CA, 92121, USA

SO Bioorganic & Medicinal Chemistry Letters (2006), 16(16), 4246-4251

CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier B.V.

DT Journal

LA English

OS CASREACT 145:188698

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 7 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:77226 CAPLUS

DN 144:171019

TI Preparation of quinoxalinones as estrogen receptor ligands for treating various diseases

IN Mahaney, Paige Erin; Webb, Michael Byron; Ye, Fei; Sabatucci, Joseph Peter  
PA Wyeth, USA

SO U.S. Pat. Appl. Publ., 21 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 20060019961	A1	20060126	US 2005-147489	20050608
	US 7351709	B2	20080401		
PRAI	US 2004-578179P	P	20040609		

OS MARPAT 144:171019

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 8 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:77202 CAPLUS

DN 144:170990

TI Preparation of benzimidazole derivatives as gonadotropin releasing hormone  
receptor antagonists

IN Garrick, Lloyd M.; Hauze, Diane B.; Kees, Kenneth L.; Lundquist Iv,  
Joseph, T.; Mann, Charles, W.; Mehlmann, John, F.; Pelletier, Jeffrey, C.;  
Rogers, John, F., Jr.; Wrobel, Jay, E.

PA Wyeth, John, and Brother Ltd., USA; Green, Daniel M.

SO PCT Int. Appl., 149 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2006009734	A1	20060126	WO 2005-US21124	20050616
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	AU 2005264996	A1	20060126	AU 2005-264996	20050616
	CA 2570968	A1	20060126	CA 2005-2570968	20050616
	US 20060019965	A1	20060126	US 2005-154795	20050616
	EP 1758895	A1	20070307	EP 2005-762686	20050616
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, LV				
	CN 101006078	A	20070725	CN 2005-80027480	20050616
	JP 2008503469	T	20080207	JP 2007-516680	20050616
	BR 2005012261	A	20080226	BR 2005-12261	20050616
	IN 2006KN03565	A	20070615	IN 2006-KN3565	20061128
	KR 2007027584	A	20070309	KR 2006-726441	20061215
	MX 2006PA14798	A	20070622	MX 2006-PA14798	20061215
	NO 2007000294	A	20070228	NO 2007-294	20070116
PRAI	US 2004-580640P	P	20040617		
	WO 2005-US21124	W	20050616		

OS MARPAT 144:170990

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 9 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:638875 CAPLUS

DN 143:153404

TI Preparation of N-substituted piperidine and piperazine derivatives  
 dopamine D2 and serotonin 2A receptor antagonists  
 IN Cho, Stephen Sung Yong; Gregory, Tracy Fay; Guzzo, Peter Robert; Howard,  
 Harry Ralph, Jr.; Nikam, Sham Shridhar; Surman, Matthew David; Walters,  
 Michael Anthony  
 PA Warner-Lambert Company Llc., USA  
 SO PCT Int. Appl., 144 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005066165	A1	20050721	WO 2004-IB4239	20041220
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW,			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2551346	A1	20050721	CA 2004-2551346	20041220
	EP 1701954	A1	20060920	EP 2004-806416	20041220
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
	BR 2004018255	A	20070417	BR 2004-18255	20041220
	JP 2007517014	T	20070628	JP 2006-546393	20041220
	MX 2006PA07654	A	20060904	MX 2006-PA7654	20060630
PRAI	US 2003-533761P	P	20031231		
	WO 2004-IB4239	W	20041220		

OS MARPAT 143:153404

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

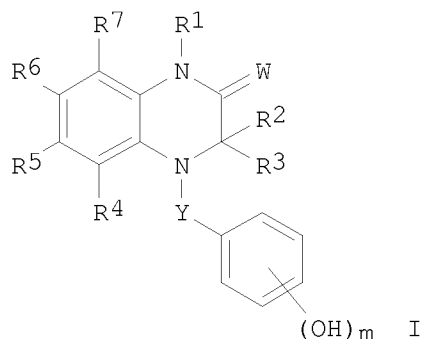
L32 ANSWER 10 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:635973 CAPLUS  
 DN 143:286315  
 TI Synthesis of pyrrolo[3,4-c]quinolines by 1,5-electrocyclisation of non-stabilized azomethine ylides  
 AU Nyerges, Miklos; Pinter, Aron; Viranyi, Andrea; Blasko, Gabor; Toke, Laszlo  
 CS Department of Organic Chemical Technology, Research Group of the Hungarian Academy of Sciences, Technical University of Budapest, Budapest, H-1521, Hung.  
 SO Tetrahedron (2005), 61(34), 8199-8205  
 CODEN: TETRAB; ISSN: 0040-4020  
 PB Elsevier B.V.  
 DT Journal  
 LA English  
 OS CASREACT 143:286315  
 RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L32 7 IBIB ABS HITSTR

L32 ANSWER 7 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:77226 CAPLUS

DOCUMENT NUMBER: 144:171019  
 TITLE: Preparation of quinoxalinones as estrogen receptor ligands for treating various diseases  
 INVENTOR(S): Mahaney, Paige Erin; Webb, Michael Byron; Ye, Fei; Sabatucci, Joseph Peter  
 PATENT ASSIGNEE(S): Wyeth, USA  
 SOURCE: U.S. Pat. Appl. Publ., 21 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060019961	A1	20060126	US 2005-147489	20050608
US 7351709	B2	20080401		
PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI	MARPAT	144:171019	US 2004-578179P	P 20040609



AB The present invention provides estrogen receptor ligands of formula I: wherein: m = 1-5; n = 0-5; W = O or C(R8)2; Y = [C(R8)2]<sub>n</sub>-X-[C(R8)2]<sub>n</sub>, wherein X = a bond, O, OC(:O), C(:O), or S(O)2; R1 = H, C1-C6 alkyl, C2-C7 alkenyl, cycloalkyl, cycloalkenyl, or arylalkyl; R2 and R3 = H, C1-C6 alkyl, or C2-C7 alkenyl, provided that both are not H; R4, R5, R6, and R7 = H, C1-C6 alkyl, C2-C7 alkenyl, hydroxy, alkoxy, aryloxy, halogen, trifluoromethyl, CN, NO2, C(:O)R8, or C(:O)OR8; and R8 = H, C1-C6 alkyl, or Ph. The present invention also relates to substituted 4-(hydroxybenzoyl)-3,4-dihydroquinoxalin-2(1H)-ones and substituted 4-(hydroxyphenylsulfonyl)-3,4-dihydroquinoxalin-2(1H)-ones useful for the treatment of the inflammatory component of diseases. These compds. are useful in treating diseases associated with excessive estrogen receptor activity, particularly atherosclerosis, myocardial infarction, congestive heart failure, inflammatory bowel disease, arthritis, type II diabetes, and autoimmune diseases such as multiple sclerosis and rheumatoid arthritis. Thus, (3R)-3-Ethyl-7-fluoro-4-(4-hydroxybenzoyl)-1-methyl-3,4-dihydroquinoxalin-2(1H)-one (II) was prepared from 2,5-difluoronitrobenzene, (R)-2-aminobutyric acid, and 4-methoxybenzoyl chloride in 5 steps. In Ad5-wt-ER infected HAECT-1 cells, II and the other compds. of the invention potently and efficaciously inhibit IL-6 expression but do not induce CK expression in an ER-dependent manner.

IT 874216-91-8P, (3S)-3-Ethyl-6-methyl-3,4-dihydroquinoxalin-2(1H)-one 874216-92-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

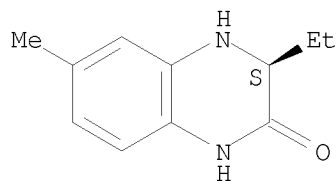


(preparation of quinoxalinones as estrogen receptor ligands for treating various diseases)

RN 874216-91-8 CAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-3,4-dihydro-6-methyl-, (3S)- (CA INDEX NAME)

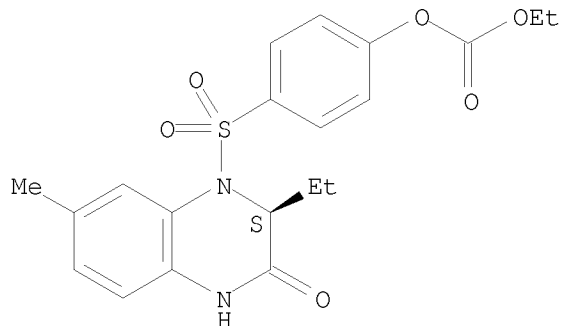
Absolute stereochemistry.



RN 874216-92-9 CAPLUS

CN Carbonic acid, ethyl 4-[[[(2S)-2-ethyl-3,4-dihydro-7-methyl-3-oxo-1(2H)-quinoxaliny]sulfonyl]phenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L32 9 IBIB ABS HITSTR

L32 ANSWER 9 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:638875 CAPLUS

DOCUMENT NUMBER: 143:153404

TITLE: Preparation of N-substituted piperidine and piperazine derivatives dopamine D2 and serotonin 2A receptor antagonists

INVENTOR(S): Cho, Stephen Sung Yong; Gregory, Tracy Fay; Guzzo, Peter Robert; Howard, Harry Ralph, Jr.; Nikam, Sham Shridhar; Surman, Matthew David; Walters, Michael Anthony

PATENT ASSIGNEE(S): Warner-Lambert Company Llc., USA

SOURCE: PCT Int. Appl., 144 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005066165	A1	20050721	WO 2004-IB4239	20041220

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2551346 A1 20050721 CA 2004-2551346 20041220  
 EP 1701954 A1 20060920 EP 2004-806416 20041220

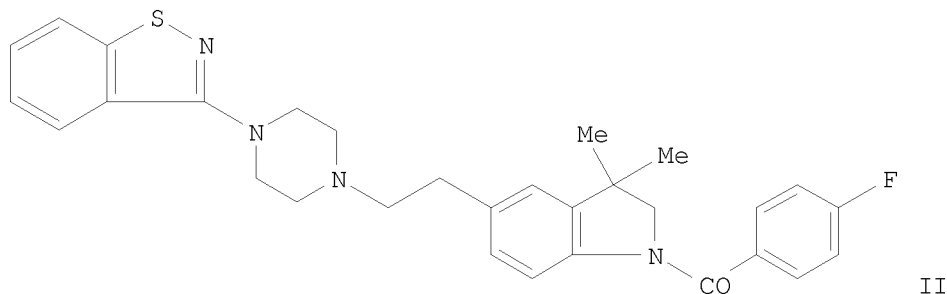
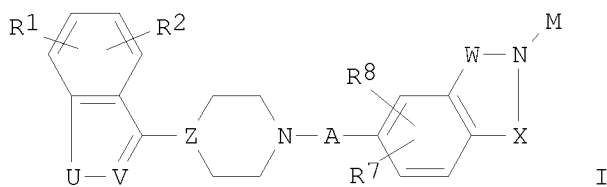
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

BR 2004018255 A 20070417 BR 2004-18255 20041220  
 JP 2007517014 T 20070628 JP 2006-546393 20041220  
 MX 2006PA07654 A 20060904 MX 2006-PA7654 20060630

PRIORITY APPLN. INFO.:

US 2003-533761P P 20031231  
 WO 2004-IB4239 W 20041220

OTHER SOURCE(S): MARPAT 143:153404  
 GI



AB This invention relates to N-substituted piperidine and piperazine derivs. (shown as I; variables defined below; e.g. [5-[2-[4-(benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3,3-dimethyl-2,3-dihydroindol-1-yl](4-fluorophenyl)methanone (shown as II)), pharmaceutical compns. containing them and their use in the treatment of central nervous system and other disorders. Although the methods of preparation are not claimed, example preps. and/or characterization data for .apprx.160 I are included. For example, II was prepared in 98 % yield by coupling 3-[4-[2-(3,3-dimethyl-2,3-dihydro-1H-indol-5-yl)ethyl]piperazin-1-yl]benzo[d]isothiazole with 4-fluorobenzoyl chloride; the benzo[d]isothiazole reactant was prepared in 79 % yield by reduction of 5-[2-[4-(benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3,3-dimethyl-1,3-dihydroindol-2-one, which was prepared in 96 % yield from 3-(piperazin-1-yl)benzo[d]isothiazole and 5-(2-chloroethyl)-3,3-dimethyl-1,3-dihydroindol-2-one, which was prepared in 45 % yield by reduction of 5-(2-chloroethyl)-3,3-dimethyl-1,3-dihydroindol-2-one, which was prepared in >96 % yield from chloroacetyl chloride and 3,3-dimethyl-1,3-dihydroindol-2-one. For I: M = E-R9, L-T-R9, T-D-R9; U is S, O, SO, SO2,

CH<sub>2</sub> or NR<sub>3</sub>; V is N or C; Z is N or C; A is -(CH<sub>2</sub>)<sub>m</sub>O-, -(CH<sub>2</sub>)<sub>m</sub>NR<sub>4</sub>-, or -(CH<sub>2</sub>)<sub>m</sub>C(R<sub>5</sub>R<sub>6</sub>)-, wherein R<sub>5</sub> and R<sub>6</sub> = H, (C1-C4) alkyl (un)substituted with 1-3 F atoms, (C1-C4) alkoxy (un)substituted with 1-3 F atoms, hydroxy, and aminoalkyl; or R<sub>5</sub> and R<sub>6</sub> together form a carbonyl, and wherein m = 1-4. R<sub>1</sub> and R<sub>2</sub> = H, (C1-C4) alkyl (un)substituted with 1-3 F atoms, (C1-4) alkoxy (un)substituted with 1-3 F atoms, halogen, nitro, cyano, amino, (C1-C4) alkylamino and di(C1-C4) alkylamino; R<sub>3</sub> and R<sub>4</sub> = H, (C1-C4) alkyl (un)substituted with 1-3 F atoms and (C1-C4) alkoxy (un)substituted with 1-3 F atoms; or, when U is NR<sub>3</sub>, one of R<sub>1</sub> and R<sub>2</sub> can form, together with the C to which it is attached, and together with R<sub>3</sub> and the N to which it is attached, a heterocyclic ring containing 4-7 ring members of which 1-3 ring members can be N, O and S, and of which the remaining ring members are C, with the proviso that when R<sub>3</sub> forms a ring with one of R<sub>1</sub> and R<sub>2</sub>, the other of R<sub>1</sub> and R<sub>2</sub> is absent. X is -[C(R<sub>11</sub>)(R<sub>12</sub>)]o-, wherein R<sub>11</sub> and R<sub>12</sub> = H and (C1-C4) alkyl (un)substituted with 1-3 F atoms, and wherein o = 0-3, with the proviso that when W is absent, o ≥ 2; W is -[C(R<sub>13</sub>)(R<sub>14</sub>)]p-, wherein R<sub>13</sub> and R<sub>14</sub> = H and (C1-C4) alkyl (un)substituted with 1-3 F atoms, and wherein p = 0-4, with the proviso that when X is absent, p ≥ 2; R<sub>7</sub> and R<sub>8</sub> = halo, R<sub>1</sub> and -OR<sub>1</sub>; or R<sub>7</sub>, when attached to a C adjacent to one of the C atoms shared by both the Ph ring to which R<sub>7</sub> is attached and the ring containing W, N and X, forms, together with a C atom of X or a C atom of W, a saturated carbocyclic ring containing 3-6 C atoms. R<sub>9</sub> = Ph, phenoxy, benzyloxy, and phenylamino, wherein the Ph moieties are (un)substituted with 1-3 halo, (C1-C3) alkyl (un)substituted with 1-3 F atoms, (C1-C3) alkoxy (un)substituted with 1-3 F atoms, nitro, cyano, amino, and (C1-C3) alkylamino; or R<sub>9</sub> is a pyrrolidine, piperidine or morpholine ring wherein the point of attachment to D, T or E is the ring N, and wherein said pyrrolidine, piperidine or morpholine ring can be (un)substituted with 1 or 2 Me, amino, (C1-04) alkylamino, and di(C1-C4) alkylamino; or R<sub>9</sub> is a furan, thiophene, or pyrazole ring (un)substituted with 1-2 (C1-C4) alkyl groups; or R<sub>9</sub> is (C1-C6) straight or branched alkyl or (C3-C6) cycloalkyl, wherein said straight, branched and cyclic alkyl moieties are be (un)substituted with 1-3 halo atoms or (C1-C4) alkoxy (un)substituted with 1-3 F atoms; or R<sub>9</sub> is halogen, nitro, cyano, amino, (C1-C4) alkylamino, di(C1-C4) alkylamino or OR<sub>1</sub>, wherein the alkyl moieties of (C1-C4) alkylamino and di(C1-C4) alkylamino are (un)substituted with an amino, (C1-C4) alkylamino, or di(C1-C4) alkylamino group; E is -C(O)-, -S(O)- or -SO<sub>2</sub>-; T is -C(O)- or -CO<sub>2</sub>-; L is -(CH<sub>2</sub>)<sub>n</sub> wherein n = 0-3; D is -(CHR<sub>10</sub>)<sub>q</sub>-, wherein q = 1-3, or NR<sub>10</sub>; R<sub>10</sub> is H or straight or branched (C1-C3) alkyl.

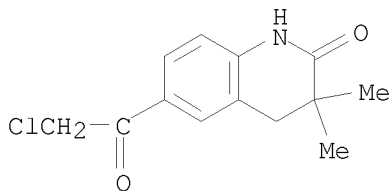
IT 133998-80-8P, 6-(2-Chloroacetyl)-3,3-dimethyl-3,4-dihydro-1H-quinolin-2-one 133998-94-4P, 6-(2-Chloroethyl)-3,3-dimethyl-3,4-dihydro-1H-quinolin-2-one

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N-substituted piperidine and piperazine derivs. dopamine D<sub>2</sub> and serotonin 2A receptor antagonists)

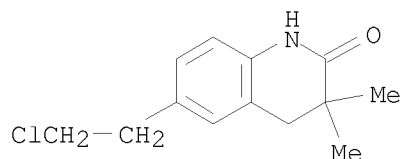
RN 133998-80-8 CAPLUS

CN 2(1H)-Quinolinone, 6-(chloroacetyl)-3,4-dihydro-3,3-dimethyl- (9CI) (CA INDEX NAME)



RN 133998-94-4 CAPLUS

CN 2(1H)-Quinolinone, 6-(2-chloroethyl)-3,4-dihydro-3,3-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L32 11-15

L32 ANSWER 11 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:592783 CAPLUS  
DN 143:259482  
TI Syntheses and binding affinities of 6-nitroquipazine analogues for serotonin transporter. Part 4: 3-Alkyl-4-halo-6-nitroquipazines  
AU Moon, Byung Seok; Lee, Byoung Se; Chi, Dae Yoon  
CS Department of Chemistry, Inha University, Incheon, 402-751, S. Korea  
SO Bioorganic & Medicinal Chemistry (2005), 13(16), 4952-4959  
CODEN: BMECEP; ISSN: 0968-0896  
PB Elsevier Ltd.  
DT Journal  
LA English  
OS CASREACT 143:259482  
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 12 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:527840 CAPLUS  
DN 143:77752  
TI A novel intramolecular photocyclization of N-(2-bromoalkanoyl) derivatives of 2-acylanilines via 1,8-hydrogen abstraction  
AU Nishio, Takehiko; Koyama, Hiroyuki; Sasaki, Daigo; Sakamoto, Masami  
CS Department of Chemistry, Graduate School of Pure and Applied Sciences, University of Tsukuba, Ibaraki, 305-8571, Japan  
SO Helvetica Chimica Acta (2005), 88(5), 996-1003  
CODEN: HCACAV; ISSN: 0018-019X  
PB Verlag Helvetica Chimica Acta  
DT Journal  
LA English  
OS CASREACT 143:77752  
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 13 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:360410 CAPLUS  
DN 143:60232  
TI The synthesis of 'tyrosyl' peptidomimetics by acid-catalyzed N(1)-C(4) ring opening of 4-(4'-hydroxyphenyl)-azetidine-2-ones  
AU Mandal, Pijus Kumar; Cabell, Larry A.; McMurray, John S.  
CS M.D. Anderson Cancer Center, Department of Neuro-Oncology, The University of Texas, Houston, TX, 77030, USA  
SO Tetrahedron Letters (2005), 46(21), 3715-3718  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier B.V.

DT Journal  
LA English  
OS CASREACT 143:60232  
RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 14 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:300419 CAPLUS  
DN 142:373844  
TI Preparation of tetrazole, thiazolidindione derivatives as AGEs production inhibitors  
IN Yanagisawa, Hiroaki; Amemiya, Yoshiya; Kurokawa, Kiyoshi; Miyata, Toshio  
PA Sankyo Company, Limited, Japan; Renaissance Co., Ltd.  
SO PCT Int. Appl., 59 pp.  
CODEN: PIXXD2

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2005030737	A1	20050407	WO 2004-JP14684	20040929
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2540355	A1	20050407	CA 2004-2540355	20040929
	EP 1679310	A1	20060712	EP 2004-773615	20040929
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	BR 2004014944	A	20061107	BR 2004-14944	20040929
	CN 1886386	A	20061227	CN 2004-80034949	20040929
	US 20070105846	A1	20070510	US 2006-573274	20060707
PRAI	JP 2003-340007	A	20030930		
	WO 2004-JP14684	W	20040929		

OS MARPAT 142:373844

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 15 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:295614 CAPLUS  
DN 142:481927  
TI Regioselective synthesis of 3,3-diethyl-4-(methylene)-1-quinol-2-ones by an intramolecular microwave assisted Heck reaction  
AU Smalley, Terrence L., Jr.; Mills, Wendy Y.  
CS Metabolic & Viral CEDD Chemistry, GlaxoSmithKline, Inc., Research Triangle Park, NC, 27709, USA  
SO Journal of Heterocyclic Chemistry (2005), 42(2), 327-331  
CODEN: JHTCAD; ISSN: 0022-152X

PB HeteroCorporation

DT Journal

LA English

OS CASREACT 142:481927

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D 15 IBIB ABS HITSTR

L33 ANSWER 15 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:521015 CAPLUS

DOCUMENT NUMBER: 147:30962

TITLE: Preparation of 1,2-dihydroquinoline derivatives as inhibitors of epithelial growth factor receptor for treatment of tumor

INVENTOR(S): Luo, Xiaomin; Li, Jian; Jiang, Hualiang; Shen, Xu; Liu, Hong; Shen, Jianhua; Zhu, Weiliang; Fu, Lili; Li, Lin; Mei, Changlin

PATENT ASSIGNEE(S): Shanghai Institute of Materia Medica, Chinese Academy of Sciences, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 19pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

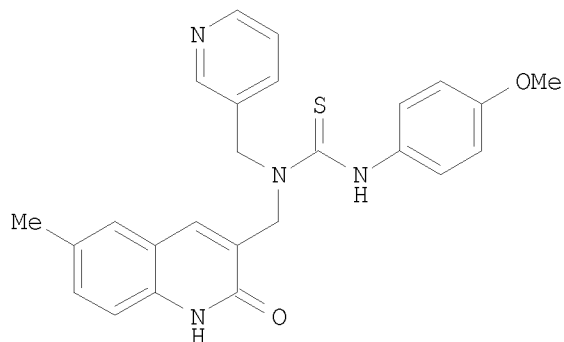
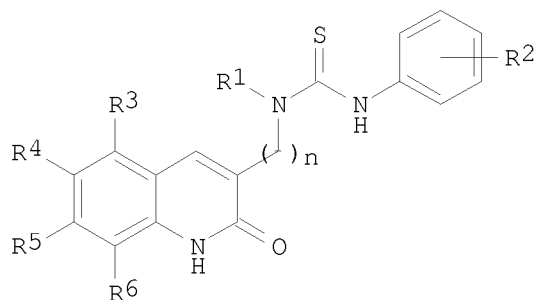
LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1958572	A	20070509	CN 2005-10110045	20051104
PRIORITY APPLN. INFO.:			CN 2005-10110045	20051104
OTHER SOURCE(S):			CASREACT 147:30962; MARPAT 147:30962	

GI



AB The title 1,2-dihydroquinoline derivs. I [wherein n = 1-3; R1 and R2 = independently H, (cyclo)alkyl, benzyl, or (un)substituted (hetero)aryl; R3-R6 = independently H, alkyl, alkoxy, NO2, halo, etc.], or enantiomers, diastereoisomers, racemates, mixts., or pharmaceutically acceptable salts

thereof were prepared as inhibitors of epithelial growth factor receptor (EGFR) for treatment of tumor (no data). For example, II was prepared in a multi-step synthesis. II showed 55.3% inhibitory activity against SPCA1 human lung cancer cell.

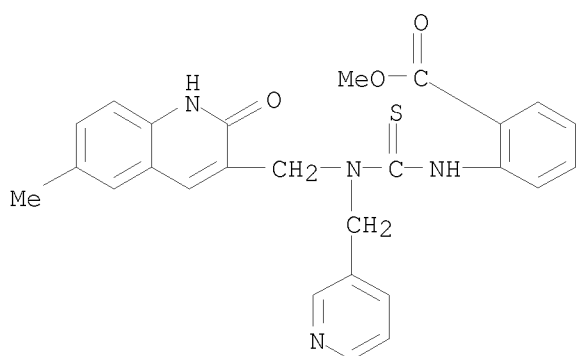
IT 460339-75-7P 483332-87-2P 483332-89-4P  
914774-16-6P 914774-24-6P 914774-25-7P  
914774-31-5P 914774-33-7P 938446-55-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of 1,2-dihydroquinoline derivs. as EGFR inhibitors for treatment of tumor)

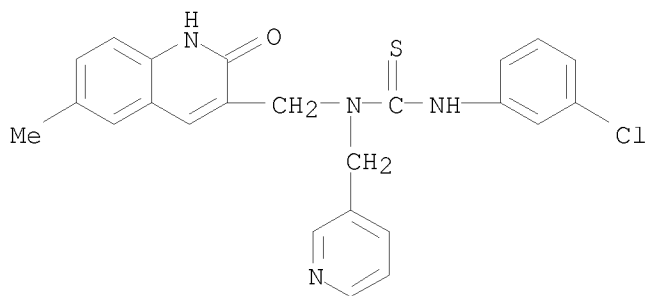
RN 460339-75-7 CAPLUS

CN Benzoic acid, 2-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl](3-pyridinylmethyl)amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)



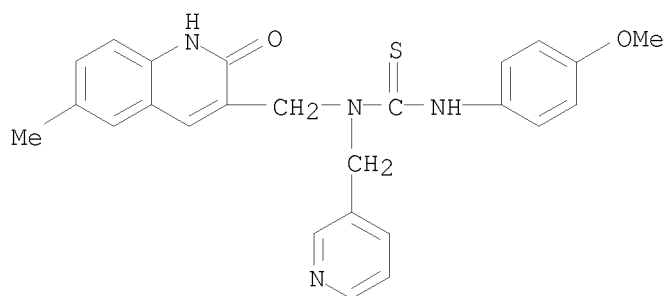
RN 483332-87-2 CAPLUS

CN Thiourea, N'-(3-chlorophenyl)-N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N-(3-pyridinylmethyl)- (CA INDEX NAME)

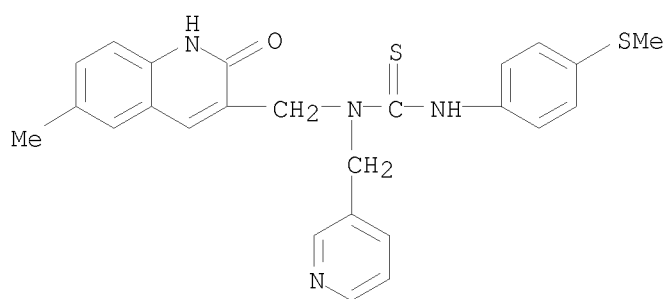


RN 483332-89-4 CAPLUS

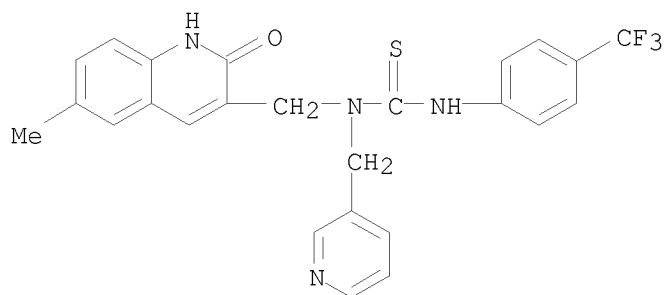
CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-(4-methoxyphenyl)-N-(3-pyridinylmethyl)- (CA INDEX NAME)



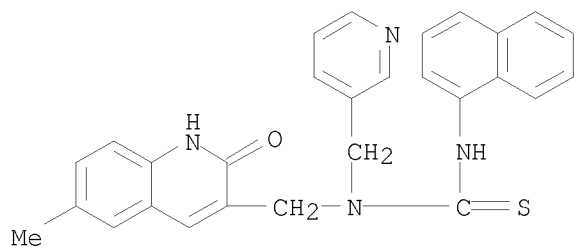
RN 914774-16-6 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-[4-(methylthio)phenyl]-N-(3-pyridinylmethyl)- (CA INDEX NAME)



RN 914774-24-6 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N-(3-pyridinylmethyl)-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

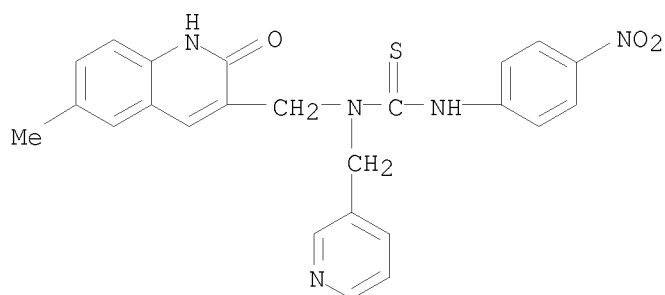


RN 914774-25-7 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-1-naphthalenyl-N-(3-pyridinylmethyl)- (CA INDEX NAME)

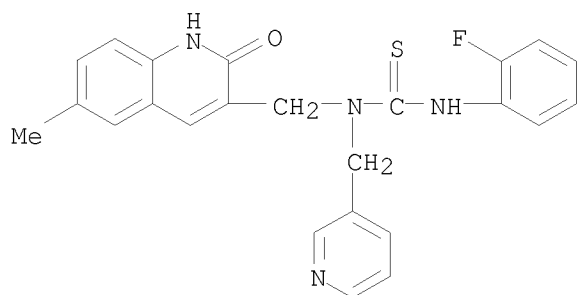




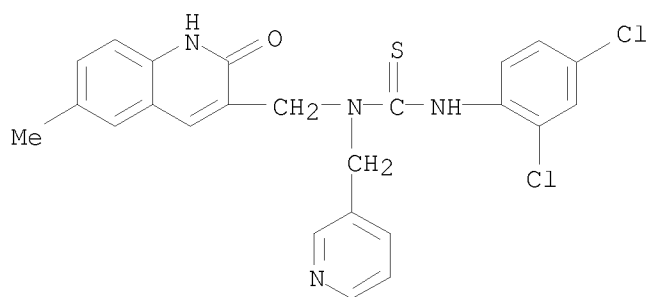
RN 914774-31-5 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-(4-nitrophenyl)-N-(3-pyridinylmethyl)- (CA INDEX NAME)



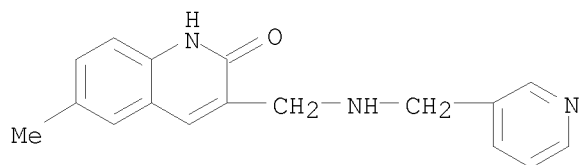
RN 914774-33-7 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-(2-fluorophenyl)-N-(3-pyridinylmethyl)- (CA INDEX NAME)



RN 938446-55-0 CAPLUS  
 CN Thiourea, N'-(2,4-dichlorophenyl)-N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N-(3-pyridinylmethyl)- (CA INDEX NAME)



IT 462068-05-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of 1,2-dihydroquinoline derivs. as EGFR inhibitors for treatment of tumor)  
 RN 462068-05-9 CAPLUS  
 CN 2(1H)-Quinolinone, 6-methyl-3-[[ (3-pyridinylmethyl)amino]methyl]- (CA INDEX NAME)



=> D 16-20

L33 ANSWER 16 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:427291 CAPLUS  
 DN 147:45189  
 TI High-throughput screening for small-molecule activators of neutrophils: identification of novel N-formyl peptide receptor agonists  
 AU Schepetkin, Igor A.; Kirpotina, Liliya N.; Khlebnikov, Andrei I.; Quinn, Mark T.  
 CS Department of Veterinary Molecular Biology, Montana State University, Bozeman, MT, USA  
 SO Molecular Pharmacology (2007), 71(4), 1061-1074  
 CODEN: MOPMA3; ISSN: 0026-895X  
 PB American Society for Pharmacology and Experimental Therapeutics  
 DT Journal  
 LA English  
 RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 17 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:128762 CAPLUS  
 DN 146:350581  
 TI Structure-Based Pharmacophore Identification of New Chemical Scaffolds as Non-Nucleoside Reverse Transcriptase Inhibitors  
 AU Barreca, Maria Letizia; De Luca, Laura; Iraci, Nunzio; Rao, Angela; Ferro, Stefania; Maga, Giovanni; Chimirri, Alba  
 CS Dipartimento Farmaco-Chimico, Universita di Messina, Messina, 98168, Italy  
 SO Journal of Chemical Information and Modeling (2007), 47(2), 557-562  
 CODEN: JCISD8; ISSN: 1549-9596  
 PB American Chemical Society  
 DT Journal  
 LA English  
 RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 18 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:126145 CAPLUS  
 DN 146:379791  
 TI Atropisomeric 3-( $\beta$ -hydroxyethyl)-4-arylquinolin-2-ones as Maxi-K Potassium Channel Openers  
 AU Vruthula, Vivekananda M.; Dasgupta, Bireshwar; Qian-Cutrone, Jingfang; Kozlowski, Edward S.; Boissard, Christopher G.; Dworetzky, Steven I.; Wu, Dedong; Gao, Qi; Kimura, Roy; Gribkoff, Valentin K.; Starrett, John E., Jr.  
 CS Bristol-Myers Squibb Pharmaceutical Research Institute, Wallingford, CT, 06492, USA  
 SO Journal of Medicinal Chemistry (2007), 50(5), 1050-1057  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English

OS CASREACT 146:379791

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 19 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:61837 CAPLUS

DN 146:156236

TI Cellular cholesterol absorption modifiers, and their therapeutic use

IN Gardiner, Elisabeth M.; Duron, Sergio G.; Massari, Mark E.; Severance,  
Daniel L.; Semple, Joseph E.

PA Kalypsys, Inc., USA

SO PCT Int. Appl., 300pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 2007008541	A2	20070118	WO 2006-US26242	20060705
	WO 2007008541	A3	20070726		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
PRAI	US 2005-697659P	P	20050708		
	US 2005-697686P	P	20050708		
	US 2005-697814P	P	20050708		
	US 2005-727646P	P	20051017		
	US 2006-782303P	P	20060313		
OS	MARPAT 146:156236				

L33 ANSWER 20 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:53912 CAPLUS

DN 146:151898

TI Rewritable optical disks containing 1H-quinoxalin-2-one derivative

IN Miyazato, Masataka; Shiozaki, Hiroyuki; Ishida, Tsutomu; Ogiso, Akira

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 47pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 2007008045	A	20070118	JP 2005-192588	20050630
PRAI	JP 2005-192588		20050630		
OS	MARPAT 146:151898				

=> D L32 14 IBIB ABS HITSTR

L32 ANSWER 14 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:300419 CAPLUS

DOCUMENT NUMBER: 142:373844

TITLE: Preparation of tetrazole, thiazolidindione derivatives  
 as AGEs production inhibitors  
 INVENTOR(S): Yanagisawa, Hiroaki; Amemiya, Yoshiya; Kurokawa,  
 Kiyoshi; Miyata, Toshio  
 PATENT ASSIGNEE(S): Sankyo Company, Limited, Japan; Renascience Co., Ltd.  
 SOURCE: PCT Int. Appl., 59 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

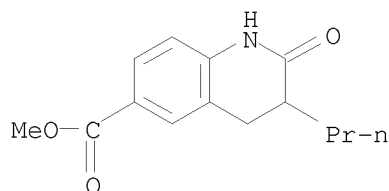
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030737	A1	20050407	WO 2004-JP14684	20040929
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2540355	A1	20050407	CA 2004-2540355	20040929
EP 1679310	A1	20060712	EP 2004-773615	20040929
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004014944	A	20061107	BR 2004-14944	20040929
CN 1886386	A	20061227	CN 2004-80034949	20040929
US 20070105846	A1	20070510	US 2006-573274	20060707
PRIORITY APPLN. INFO.:			JP 2003-340007	A 20030930
			WO 2004-JP14684	W 20040929
OTHER SOURCE(S):		MARPAT 142:373844		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [A = II, etc.; B = 1H-tetrazol-5-yl, 1,4-dioxothiazolin-5-yl; Y = single bond, arylene; R7A =alkylcarbonyl] were prepared For example, acylation of 3-aminobenzoic acid Et ester with pentanoyl chloride followed by reaction with [4-[2-(3-triphenylmethyl-3H-tetrazol-5-yl)phenyl]phenyl]methyl bromide, treatment with 75% aqueous acetic acid, aqueous LiOH afforded compound III. In AGEs (advanced glycation end products) production inhibition assays, compound III exhibited the inhibitory activity of 18.1%. Compds. I are useful for the treatment of complicated diabetes, etc. Formulations are given.

IT 849419-71-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of tetrazole, thiazolidindione derivs. as AGEs production inhibitors for treatment of complicated diabetes, etc.)

RN 849419-71-2 CAPLUS  
 CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-2-oxo-3-propyl-, methyl ester (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L32 16-20

L32 ANSWER 16 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:177819 CAPLUS  
 DN 142:280224  
 TI A combinatorial preparation of N-containing heterocycles, useful as caspase-3 inhibitors  
 IN Ivashchenko, Alexander Vasilievich; Ilyin, Alexey Petrovich; Kobak, Vladimir Vasilievich; Kravchenko, Dmitri Vladimirovich; Khvat, Alexander Viktorovich; Tkachenko, Sergey Yevgenievich; Okun, Ilya Matusovich  
 PA Chemical Diversity Research Institute, Ltd., Russia  
 SO PCT Int. Appl., 84 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Russian  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005018531	A2	20050303	WO 2004-RU331	20040825
	WO 2005018531	A3	20050512		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	RU 2248978	C1	20050327	RU 2003-125936	20030826
	RU 2259999	C2	20050910	RU 2003-125938	20030826
	RU 2251546	C1	20050510	RU 2003-126299	20030829
PRAI	RU 2003-125936	A	20030826		
	RU 2003-125938	A	20030826		
	RU 2003-126299	A	20030829		
OS	MARPAT 142:280224				

L32 ANSWER 17 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:146132 CAPLUS  
 DN 142:392149  
 TI Photochemistry of N-(2-acylphenyl)-2-methylprop-2-enamides: competition between photocyclization and long-range hydrogen abstraction  
 AU Nishio, Takehiko; Tabata, Megumi; Koyama, Hiroyuki; Sakamoto, Masami  
 CS Department of Chemistry, University of Tsukuba, Tsukuba, 305-8571, Japan  
 SO Helvetica Chimica Acta (2005), 88(1), 78-86  
 CODEN: HCACAV; ISSN: 0018-019X

PB Verlag Helvetica Chimica Acta  
DT Journal  
LA English  
OS CASREACT 142:392149  
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 18 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:137055 CAPLUS  
DN 142:373663  
TI A convenient synthesis of quinolin-2(1H)-one ring system as precursor of active drugs  
AU Giuglio-Tonolo, Gamal; Terme, Thierry; Vanelle, Patrice  
CS Laboratoire de Chimie Organique Pharmaceutique (LCOP), UMR CNRS 6517  
Faculte de Pharmacie, Marseille, 13385, Fr.  
SO Synlett (2005), (2), 251-254  
CODEN: SYNLES; ISSN: 0936-5214  
PB Georg Thieme Verlag  
DT Journal  
LA English  
OS CASREACT 142:373663  
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 19 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:258080 CAPLUS  
DN 141:314292  
TI Thermal rearrangement of 3-phenacylquinoxalones-2  
AU Kolos, N. N.; Berezkina, T. V.; Orlov, V. D.  
CS Khar'kov. Nats. Univ. im. V. N. Karazina, Kharkov, 61077, Ukraine  
SO Zhurnal Organichnoi ta Farmatsevtichnoi Khimii (2003), 1(1-2), 31-34  
CODEN: ZOFKAM  
PB Natsional'nii Farmatsevtichnii Universitet  
DT Journal  
LA Russian  
OS CASREACT 141:314292

L32 ANSWER 20 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2003:867254 CAPLUS  
DN 140:141784  
TI Syntheses and binding affinities of 6-nitroquipazine analogues for serotonin transporter: Part 3. A potential 5-HT transporter imaging agent, 3-(3-[18F]fluoropropyl)-6-nitroquipazine  
AU Lee, Byoung Se; Chu, Soyoung; Lee, Kyo Chul; Lee, Bon-Su; Chi, Dae Yoon; Choe, Yearn Seong; Kim, Sang Eun; Song, Yun Seon; Jin, Changbae  
CS Department of Chemistry, Inha University, Incheon, 402-751, S. Korea  
SO Bioorganic & Medicinal Chemistry (2003), 11(23), 4949-4958  
CODEN: BMECEP; ISSN: 0968-0896  
PB Elsevier Ltd.  
DT Journal  
LA English  
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L32 16-68 IBIB ABS HITSTR

L32 ANSWER 16 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2005:177819 CAPLUS  
DOCUMENT NUMBER: 142:280224  
TITLE: A combinatorial preparation of N-containing heterocycles, useful as caspase-3 inhibitors

INVENTOR(S): Ivashchenko, Alexander Vasilievich; Ilyin, Alexey Petrovich; Kobak, Vladimir Vasilievich; Kravchenko, Dmitri Vladimirovich; Khvat, Alexander Viktorovich; Tkachenko, Sergey Yevgenievich; Okun, Ilya Matusovich

PATENT ASSIGNEE(S): Chemical Diversity Research Institute, Ltd., Russia

SOURCE: PCT Int. Appl., 84 pp.  
CODEN: PIXXD2

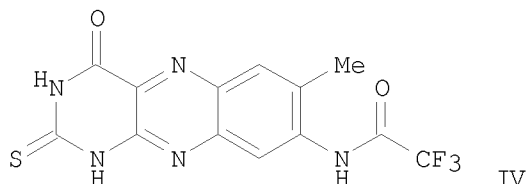
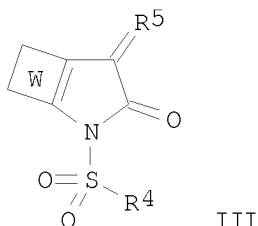
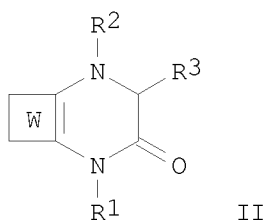
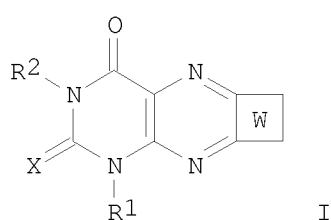
DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

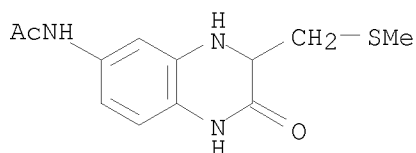
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005018531	A2	20050303	WO 2004-RU331	20040825
WO 2005018531	A3	20050512		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
RU 2248978	C1	20050327	RU 2003-125936	20030826
RU 2259999	C2	20050910	RU 2003-125938	20030826
RU 2251546	C1	20050510	RU 2003-126299	20030829
PRIORITY APPLN. INFO.:			RU 2003-125936	A 20030826
			RU 2003-125938	A 20030826
			RU 2003-126299	A 20030829
OTHER SOURCE(S):			MARPAT 142:280224	
GI				



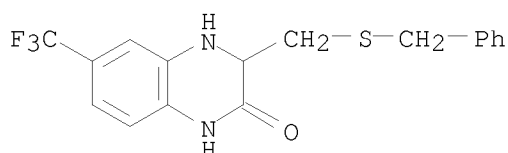
AB The invention relates to a combinatorial preparation of N-containing heterocycles

of formulas I, II, and III [wherein: R1, R2, and R3 are independently H or inert substituents; R4 is (cyclo)alkyl, aryl, or heterocyclyl; R5 is O or 4-7-membered (hetero)cycle attached to the pyrrole ring by carbon; W is (un)substituted carbocycle or heterocycle; X is O or S], useful as caspase-3 inhibitors. For instance, 2,3-dihydro-1H-benzo[g]pteridin-4-one derivs. were prepared with yields of 40-90%. The invention compds. were tested for caspase-3 inhibition (IV, IC50 = 265 nM).

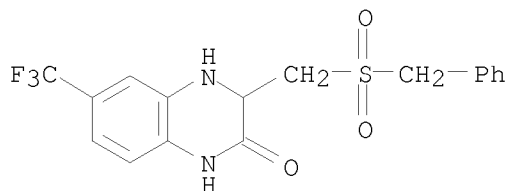
IT 847362-54-3P 847362-56-5P 847362-64-5P  
 RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)  
 (preparation of N-containing heterocycles useful as caspase 3 inhibitors)  
 RN 847362-54-3 CAPLUS  
 CN Acetamide, N-[1,2,3,4-tetrahydro-3-[(methylthio)methyl]-2-oxo-6-quinoxaliny]- (CA INDEX NAME)



RN 847362-56-5 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-3-[[ (phenylmethyl)thio]methyl]-6-(trifluoromethyl)- (CA INDEX NAME)



RN 847362-64-5 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-3-[[ (phenylmethyl)sulfonyl]methyl]-6-(trifluoromethyl)- (CA INDEX NAME)



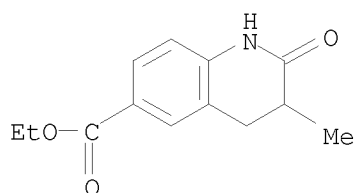
L32 ANSWER 17 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:146132 CAPLUS  
 DOCUMENT NUMBER: 142:392149  
 TITLE: Photochemistry of N-(2-acylphenyl)-2-methylprop-2-enamides: competition between photocyclization and long-range hydrogen abstraction  
 AUTHOR(S): Nishio, Takehiko; Tabata, Megumi; Koyama, Hiroyuki; Sakamoto, Masami  
 CORPORATE SOURCE: Department of Chemistry, University of Tsukuba,



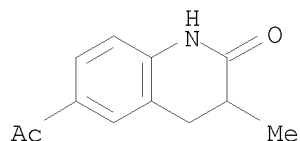
SOURCE: Tsukuba, 305-8571, Japan  
 Helvetica Chimica Acta (2005), 88(1), 78-86  
 CODEN: HCACAV; ISSN: 0018-019X  
 PUBLISHER: Verlag Helvetica Chimica Acta  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 142:392149  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

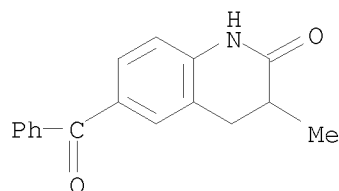
AB N-(2-acylphenyl)acrylamides I (R = Me, EtO, Ph; R1 = H, Me, Et, PhCH2; R2, R3, R4 = H, Me; R5 = H, Cl) undergo photocyclization and hydrogen transfer reactions to yield dihydroacylquinolinones II (R = Me, EtO, Ph; R1 = Me, Et, PhCH2; R2, R3, R4 = H, Me; R5 = H, Cl) and hydroxybenzenepropanamides III (R1 = Me, Et, PhCH2; R5 = H, Cl); acetylphenylacrylamides or ethoxycarbonylphenylacrylamides I (R = Me, EtO; R1 = Me, Et, PhCH2; R2, R3, R4 = H, Me; R5 = H) give II (R = Me, EtO; R1 = Me, Et, PhCH2; R2, R3, R4 = H, Me; R5 = H) as the major products, while benzoylphenylacrylamides I (R = Ph; R1 = Me, Et, PhCH2; R2 = Me; R3 = R4 = H; R5 = H, Cl) give mixts. of II (R = Ph; R1 = Me, Et, PhCH2; R2, R3 = R4 = H; R5 = H, Cl) and III (R1 = Me, Et, PhCH2; R5 = H, Cl). N-(4-acylphenyl)methacrylamides IV (R6 = Me, EtO, Ph; R7 = H, Me; R8 = Me) undergo photocyclization to provide the acyldihydroquinolinones V (R6 = Me, EtO, Ph; R7 = H, Me; R8 = Me); N-(4-acylphenyl)acrylamides IV (R6 = EtO; R7 = H, Me; R8 = H) give no product. Mechanisms for the formation of II, III, and V are proposed. The crystal structures of I (R = Ph; R1 = R2 = Me; R3 = R4 = H; R5 = H) and of III (R1 = Me; R5 = H) are determined. The structure of I (R = Ph; R1 = R2 = Me; R3 = R4 = H; R5 = H) and restrictions on the conformation of I (R = Ph; R1 = R2 = Me; R3 = R4 = H; R5 = H) in acetonitrile solution at room temperature are related to the photochem. formation of III (R1 = Me; R5 = H); when the photocyclization of I (R = Ph; R1 = R2 = Me; R3 = R4 = H; R5 = H) is performed either in acetonitrile at 60° or in toluene (where the conformation restrictions on I are lessened), the fraction of III (R = Ph; R1 = R2 = Me; R3 = R4 = H; R5 = H) formed in the reaction decreases with little change in overall product yield.  
 IT 175093-04-6P 849835-41-2P 849835-42-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (chemoselective photocyclization reactions of substituted  
 N-(4-acylphenyl) propanamides to yield tetrahydroquinolinones)  
 RN 175093-04-6 CAPLUS  
 CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3-methyl-2-oxo-, ethyl ester (CA INDEX NAME)



RN 849835-41-2 CAPLUS  
 CN 2(1H)-Quinolinone, 6-acetyl-3,4-dihydro-3-methyl- (CA INDEX NAME)

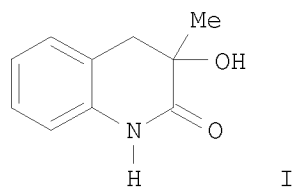


RN 849835-42-3 CAPLUS  
 CN 2(1H)-Quinolinone, 6-benzoyl-3,4-dihydro-3-methyl- (CA INDEX NAME)



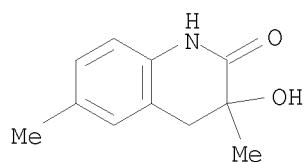
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 18 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:137055 CAPLUS  
 DOCUMENT NUMBER: 142:373663  
 TITLE: A convenient synthesis of quinolin-2(1H)-one ring system as precursor of active drugs  
 AUTHOR(S): Giuglio-Tonolo, Gamal; Terme, Thierry; Vanelle, Patrice  
 CORPORATE SOURCE: Laboratoire de Chimie Organique Pharmaceutique (LCOP), UMR CNRS 6517 Faculte de Pharmacie, Marseille, 13385, Fr.  
 SOURCE: Synlett (2005), (2), 251-254  
 CODEN: SYNLES; ISSN: 0936-5214  
 PUBLISHER: Georg Thieme Verlag  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 142:373663  
 GI



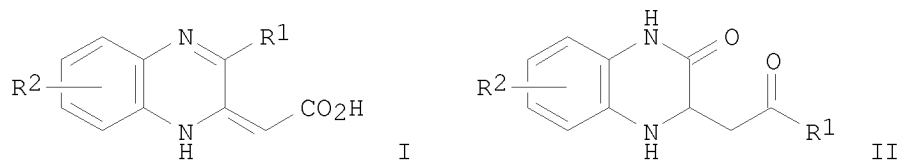
AB A series of substituted quinolin-2(1H)-ones, e.g., I, was prepared according to a two-step synthesis using TDAE methodol. from substituted o-nitrobenzyl chlorides followed by a reduction-cyclization step. The quinolinones were obtained in good yields.  
 IT 849403-22-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of hydroxy(dihydro)quinolinones via addition of nitrobenzyl chlorides to  $\alpha$ -keto esters followed by reduction and cyclization)  
 RN 849403-22-1 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-3-hydroxy-3,6-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 19 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2004:258080 CAPLUS  
DOCUMENT NUMBER: 141:314292  
TITLE: Thermal rearrangement of 3-phenacylquinoxalones-2  
AUTHOR(S): Kolos, N. N.; Berezkina, T. V.; Orlov, V. D.  
CORPORATE SOURCE: Khar'kov. Nats. Univ. im. V. N. Karazina, Kharkov, 61077, Ukraine  
SOURCE: Zhurnal Organichnoi ta Farmatsevtichnoi Khimii (2003), 1(1-2), 31-34  
CODEN: ZOFKAM  
PUBLISHER: Natsional'nii Farmatsevtichnii Universitet  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
OTHER SOURCE(S): CASREACT 141:314292  
GI

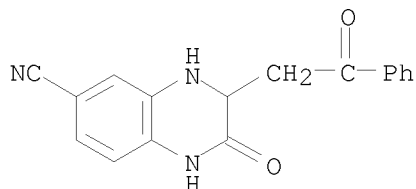


AB 2-Carboxymethylidene-3-aryl-1,2-dihydroquinoxalines I (R1 = Ph, 4-MeC6H4, 2-thienyl, R2 = H, 7-Cl; R1 = Ph, R2 = 6,7-Me2, 6-CN, 7-Cl) and unsubstituted quinoxalin-2-one were prepared by thermal rearrangement of 3-acylmethyldihydroquinoxalin-2-ones II in acetic acid or on heating above the m.p.; the direction of the reactions depends on the nature of the substituent in the quinoxaline aromatic ring. The thermodyn. characteristics of decomposition of II (R1 = Ph, R2 = H) were calculated and computer anal. of potential pharmacol. activity of some products was carried out.

IT 448959-30-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of (carboxymethylidene)dihydroquinoxalines by thermal rearrangement of (acylmethyl)dihydroquinoxalinones)

RN 448959-30-6 CAPLUS

CN 6-Quinoxalinecarbonitrile, 1,2,3,4-tetrahydro-2-oxo-3-(2-oxo-2-phenylethyl)- (CA INDEX NAME)



L32 ANSWER 20 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:867254 CAPLUS

DOCUMENT NUMBER: 140:141784

TITLE: Syntheses and binding affinities of 6-nitroquipazine analogues for serotonin transporter: Part 3. A potential 5-HT transporter imaging agent, 3-(3-[18F]fluoropropyl)-6-nitroquipazine

AUTHOR(S): Lee, Byoung Se; Chu, Soyoung; Lee, Kyo Chul; Lee, Bon-Su; Chi, Dae Yoon; Choe, Yearn Seong; Kim, Sang Eun; Song, Yun Seon; Jin, Changbae

CORPORATE SOURCE: Department of Chemistry, Inha University, Incheon, 402-751, S. Korea

SOURCE: Bioorganic & Medicinal Chemistry (2003), 11(23), 4949-4958

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 3-(3-[18F]Fluoropropyl)-6-nitroquipazine ([18F]FPNQ) as a 5-HT transporter imaging agents was designed, synthesized, and evaluated. FPNQ was selected due to its potent in vitro biol. activity ( $K_i=0.32$  nM) in rat brain cortical membranes. The 18F-labeled FPNQ was prepared by reaction of the Pr mesylate as a precursor with tetra-n-butylammonium [18F]fluoride generated under NCA conditions. The precursor mesylate was synthesized from com. available hydrocarbostyryl in nine steps in 21% overall yield. The specific activity of the [18F]FPNQ determined by radioreceptor assay was 27.0 GBq/ $\mu$ mol. Tissue distribution studies in mice showed the highest uptake in the frontal cortex (5.79 %ID/g) at 60 min post-injection.

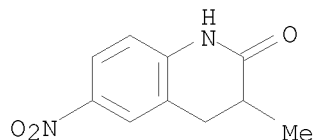
IT 651315-43-4P 651315-44-5P 651315-45-6P  
651315-46-7P 651315-47-8P 651315-51-4P  
651315-52-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of nitroquipazine analogs as potential 5-HT transporter imaging agents)

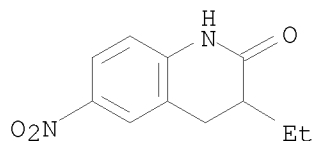
RN 651315-43-4 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-3-methyl-6-nitro- (CA INDEX NAME)

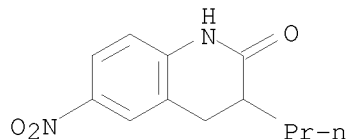


RN 651315-44-5 CAPLUS

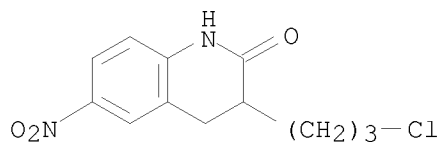
CN 2(1H)-Quinolinone, 3-ethyl-3,4-dihydro-6-nitro- (CA INDEX NAME)



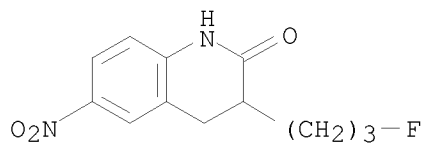
RN 651315-45-6 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-dihydro-6-nitro-3-propyl- (CA INDEX NAME)



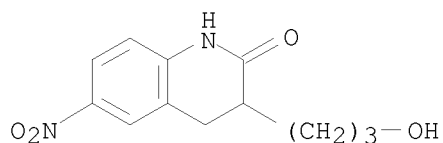
RN 651315-46-7 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(3-chloropropyl)-3,4-dihydro-6-nitro- (CA INDEX NAME)



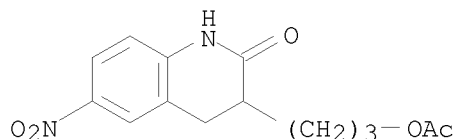
RN 651315-47-8 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(3-fluoropropyl)-3,4-dihydro-6-nitro- (CA INDEX NAME)



RN 651315-51-4 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-dihydro-3-(3-hydroxypropyl)-6-nitro- (CA INDEX NAME)

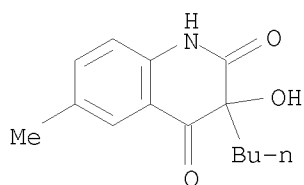


RN 651315-52-5 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[3-(acetyloxy)propyl]-3,4-dihydro-6-nitro- (CA INDEX NAME)



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 21 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:658581 CAPLUS  
 DOCUMENT NUMBER: 139:364796  
 TITLE: Thermal rearrangement of 3-hydroxy-1H,3H-quinoline-2,4-diones to 3-acyloxy-2,3-dihydro-1H-indol-2-ones  
 AUTHOR(S): Klasek, Antonin; Koristek, Kamil; Kafka, Stanislav; Kosmrlj, Janez  
 CORPORATE SOURCE: Faculty of Technology, Tomas Bata University, Zlin, 762 72, Czech Rep.  
 SOURCE: Heterocycles (2003), 60(8), 1811-1820  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PUBLISHER: Japan Institute of Heterocyclic Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 139:364796  
 AB 3-Alkyl/aryl-3-hydroxy-1H,3H-quinoline-2,4-diones were transformed into isomeric 3-acyloxy-2,3-dihydro-1H-indol-2-ones by thermally induced mol. rearrangement. All products were characterized by their 1H NMR, 13C NMR, and IR spectra.  
 IT 266348-62-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (thermal rearrangement of 3-hydroxy-1H,3H-quinoline-2,4-diones to 3-acyloxy-2,3-dihydro-1H-indol-2-ones)  
 RN 266348-62-3 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 3-butyl-3-hydroxy-6-methyl- (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 22 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:148483 CAPLUS  
 DOCUMENT NUMBER: 139:69172  
 TITLE: Synthesis of pyrrolo[3,4-c]quinolines by 1,5-electrocyclization of non-stabilized azomethine ylides  
 AUTHOR(S): Pinter, Aron; Nyerges, Miklos; Viranyi, Andrea; Toke, Laszlo  
 CORPORATE SOURCE: Department of Organic Chemical Technology, Research Group of the Hungarian Academy of Sciences, Technical University of Budapest, Budapest, H-1521, Hung.

SOURCE: Tetrahedron Letters (2003), 44(11), 2343-2346  
CODEN: TELEAY; ISSN: 0040-4039  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 139:69172

AB A new route to the pyrrolo[3,4-c]quinoline ring system was developed via the 1,5-dipolar electrocyclization reactions of azomethine ylides derived from easily available 3-formylquinoline derivs. The products thus obtained included 1,2,5,9b-tetrahydro-2-methyl-4H-pyrrolo[3,4-c]quinolin-4-one derivs. and 2-methyl-4-phenyl-2H-pyrrolo[3,4-c]quinoline derivs. The intermediacy of azomethine ylides was shown by the trapping of the proposed dipoles with N-phenylmaleimide.

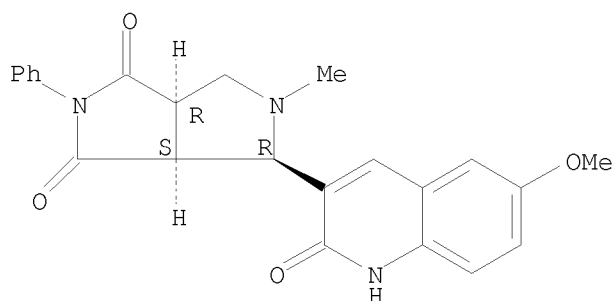
IT 548794-79-2P 548794-82-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of pyrrolo[3,4-c]quinolines by 1,5-electrocyclization of non-stabilized azomethine ylides)

RN 548794-79-2 CAPLUS

CN Pyrrolo[3,4-c]pyrrole-1,3(2H,3aH)-dione, 4-(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)tetrahydro-5-methyl-2-phenyl-, (3aR,4S,6aS)-rel- (CA INDEX NAME)

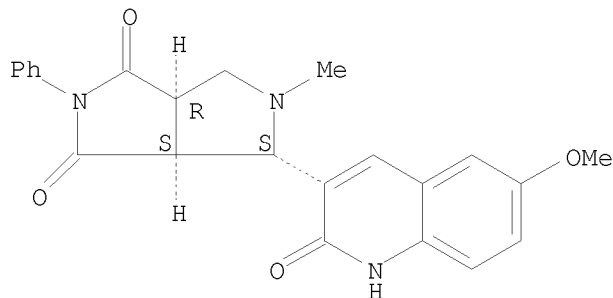
Relative stereochemistry.



RN 548794-82-7 CAPLUS

CN Pyrrolo[3,4-c]pyrrole-1,3(2H,3aH)-dione, 4-(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)tetrahydro-5-methyl-2-phenyl-, (3aR,4R,6aS)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 23 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

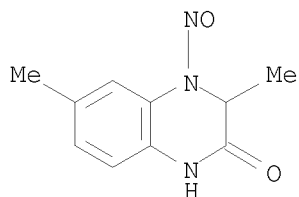
ACCESSION NUMBER: 2003:126821 CAPLUS

DOCUMENT NUMBER: 140:70560  
 TITLE: Antiinflammatory and antinociceptive activities of some benzotriazolylalkanoic acids  
 AUTHOR(S): Boido, Alessandro; Vazzana, Iana; Mattioli, Francesca; Sparatore, Fabio  
 CORPORATE SOURCE: Dipartimento di Scienze Farmaceutiche, Universita di Genova, Genoa, I-16132, Italy  
 SOURCE: Farmaco (2003), 58(1), 33-44  
 CODEN: FRMCE8; ISSN: 0014-827X  
 PUBLISHER: Editions Scientifiques et Medicales Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Sets of benzotriazol-1/2-yl-alkanoic acids (1, 2, 3) and benzotriazol-1-yloxyalkanoic acids (4, 5) were prepared and tested for antiinflammatory activity; when significant activity was observed also the antinociceptive activity was explored. While the acids of structure 1, 4 and 5 were devoid of antiinflammatory action, most 2-(benzotriazol-1/2-yl)propionic acids (2, 3) exhibited significant activity as antiinflammatory and antinociceptive agents, with compound 2c and 3a being the most active in the two assays, resp. The dextro-rotatory enantiomer of 2c ((+)-2c) was also prepared and found to be practically as active as the racemic mixture, though some differences in the steepness of the dose-response curves were observed

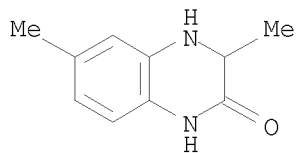
IT 639474-98-9P  
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (benzotriazolylalkanoic acids preparation and antiinflammatory and analgesic action)

RN 639474-98-9 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-3,6-dimethyl-4-nitroso- (CA INDEX NAME)



IT 90917-92-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (benzotriazolylalkanoic acids preparation and antiinflammatory and analgesic action)

RN 90917-92-3 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-3,6-dimethyl- (CA INDEX NAME)

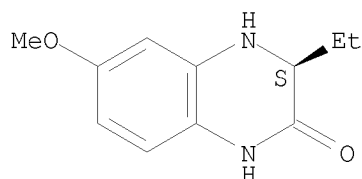


REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



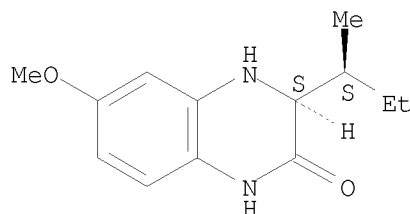
ACCESSION NUMBER: 2002:830853 CAPLUS  
 DOCUMENT NUMBER: 138:73486  
 TITLE: Application of ReactArray Robotics and Design of Experiments Techniques in Optimization of Supported Reagent Chemistry  
 AUTHOR(S): Jamieson, Craig; Congreve, Miles S.; Emiabata-Smith, David F.; Ley, Steven V.; Scicinski, Jan J.  
 CORPORATE SOURCE: Medicines Research Centre, GlaxoSmithKline R&D, Stevenage, Hertfordshire, SG1 2NY, UK  
 SOURCE: Organic Process Research & Development (2002), 6(6), 823-825  
 CODEN: OPRDFK; ISSN: 1083-6160  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:73486  
 AB The application of ReactArray automation together with Design of Expts. (DoE) techniques in optimizing chemical involving supported reagents is discussed.  
 IT 178041-70-8P 479677-36-6P 479677-37-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of amino acid derivs.; application of ReactArray robotics and design of expts. techniques in optimization of supported reagent chemical)  
 RN 178041-70-8 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-ethyl-3,4-dihydro-6-methoxy-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



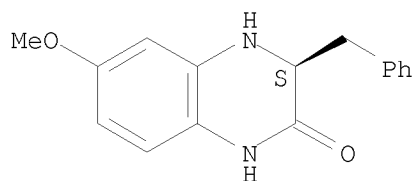
RN 479677-36-6 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3-[(1S)-1-methylpropyl]-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 479677-37-7 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3-(phenylmethyl)-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 25 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:429780 CAPLUS

DOCUMENT NUMBER: 137:149792

TITLE: Prediction of Activity for Nonnucleoside Inhibitors with HIV-1 Reverse Transcriptase Based on Monte Carlo Simulations

AUTHOR(S): Rizzo, Robert C.; Udier-Blagovic, Marina; Wang, De-Ping; Watkins, Edward K.; Kroeger Smith, Marilyn B.; Smith, Richard H., Jr.; Tirado-Rives, Julian; Jorgensen, William L.

CORPORATE SOURCE: Western Maryland College, Department of Chemistry, and the Department of Chemistry, Yale University, New Haven, CT, 06520-8107, USA

SOURCE: Journal of Medicinal Chemistry (2002), 45(14), 2970-2987

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Results of Monte Carlo (MC) simulations for more than 200 nonnucleoside inhibitors of HIV-1 reverse transcriptase (NNRTIs) representing eight diverse chemotypes have been correlated with their anti-HIV activities in an effort to establish simulation protocols and methods that can be used in the development of more effective drugs. Each inhibitor was modeled in a complex with the protein and by itself in water, and potentially useful descriptors of binding affinity were collected during the MC simulations. A viable regression equation was obtained for each data set using an extended linear response approach, which yielded  $r^2$  values between 0.54 and 0.85 and an average unsigned error of only 0.50 kcal/mol. The most common descriptors confirm that a good geometrical match between the inhibitor and the protein is important and that the net loss of hydrogen bonds with the inhibitor upon binding is unfavorable. Other phys. reasonable descriptors of binding are needed on a chemotype case-by-case basis. By including descriptors in common from the individual fits, combination regressions that include multiple data sets were also developed. This procedure led to a refined "master" regression for 210 NNRTIs with an  $r^2$  of 0.60 and a cross-validated  $q^2$  of 0.55. The computed activities show an rms error of 0.86 kcal/mol in comparison with experiment and an average

unsigned error of 0.69 kcal/mol. Encouraging results were obtained for the predictions of 27 NNRTIs, representing a new chemotype not included in the development of the regression model. Predictions for this test set using the master regression yielded a  $q^2$  value of 0.51 and an average unsigned error of 0.67 kcal/mol. Finally, addnl. regression anal. reveals that use of ligand-only descriptors leads to models with much diminished predictive ability.

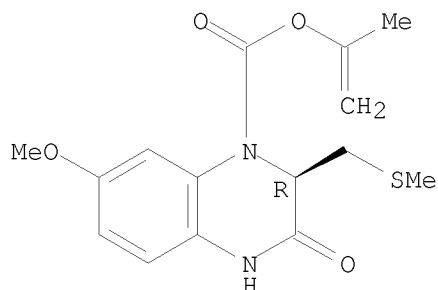
IT 178041-10-6

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prediction of activity for nonnucleoside inhibitors with HIV-1 reverse

transcriptase based on Monte Carlo simulations)  
 RN 178041-10-6 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-  
 [(methylthio)methyl]-3-oxo-, 1-methylethenyl ester, (2R)- (CA INDEX NAME)

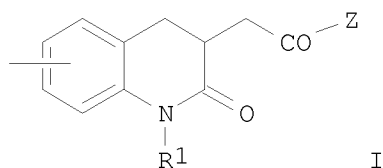
Absolute stereochemistry.



REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 26 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:429548 CAPLUS  
 DOCUMENT NUMBER: 137:20304  
 TITLE: Phenyl-oxo-tetrahydroquinolin-3-yl as selective beta-3  
 adrenergic receptor agonists  
 INVENTOR(S): Coghlan, Richard Dale; Fobare, William Floyd  
 PATENT ASSIGNEE(S): American Home Products Corporation, USA; Wyeth  
 SOURCE: U.S. Pat. Appl. Publ., 15 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

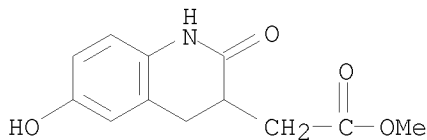
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020068751	A1	20020606	US 2001-904116	20010712
US 6514991	B2	20030204		
PRIORITY APPLN. INFO.:			US 2000-218597P	P 20000717
OTHER SOURCE(S):	MARPAT 137:20304			
GI				



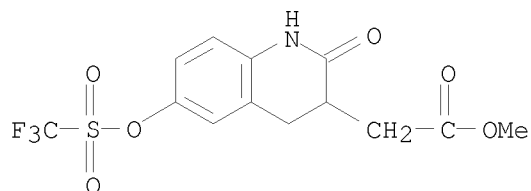
AB This invention provides compds. (I; AXCH(OH)CH2NHCH2C6H4B) or a pharmaceutically acceptable salt thereof, which are useful in treating or inhibiting metabolic disorders related to insulin resistance or hyperglycemia (typically associated with obesity or glucose intolerance), atherosclerosis, gastrointestinal disorders, neurogenic inflammation, glaucoma, ocular hypertension and frequent urination; and are particularly useful in the treatment or inhibition of type II diabetes. I are also useful for increasing the lean meat to fat ratio in a mammal in need

thereof. In I, A is (a) Ph, optionally substituted with 1-3 Y groups; (b) a 5- or 6-membered heterocyclic ring having 1-4 heteroatoms selected from O, N, and S, optionally substituted with 1-2 Y groups; (c) a phenyl-fused heterocycle having 1-4 heteroatoms selected from O, N, and S, optionally substituted with 1-2 Y groups; (d) a phenyl-fused heterocycle having 1-4 heteroatoms selected from O, N, and S, having a 2nd Ph ring fused to the heterocyclic ring, optionally substituted with 1-2 Y groups. B is shown as II. Y is hydroxy, halogen, cyano, SOmR2, SOnR2R3, NHSO2R2, NR2R3, alkyl of 1-10 C atoms, cycloalkyl of 3-8 C atoms, alkoxy of 1-10 C atoms, arylalkoxy, COR2, or CO2R2. X is OCH2 or a bond; Z is OR2 or NR2R3; R1 is H, alkyl of 1-6 C atoms, or cycloalkyl of 3-8 C atoms. R2 and R3 are each, independently, H; alkyl of 1-10 C atoms which may be optionally substituted with 1-5 substituents selected from the group consisting of halogen, hydroxy, Ph optionally substituted with 1-2 W groups, oxo, CO2R4, NR4R5, and NHCOR4; cycloalkyl of 3-8 C atoms; arylalkyl having 1-10 C atoms in the alkyl moiety; or heterocycle or heterocycle-alkyl, where the alkyl moiety has 1-5 C atoms and the heterocycle is: (a) a 5- or 6-membered heterocyclic ring having 1-4 heteroatoms selected from O, N, and S, optionally substituted with 1-2 Y groups; (b) a phenyl-fused heterocycle having 1-4 heteroatoms selected from O, N, and S, optionally substituted with 1-2 Y groups; (c) a phenyl-fused heterocycle having 1-4 heteroatoms selected from O, N, and S, having a 2nd Ph ring fused to the heterocyclic ring, optionally substituted with 1-2 Y groups. R4 and R5 are each, independently, H, alkyl of 1-10 C atoms, or cycloalkyl of 3-8 C atoms; W is hydroxy, halogen, alkyl of 1-10 C atoms, arylalkoxy having 1-6 C atoms in the alkyl moiety, NHC(O)NHR4, NR4R5, OR4, COR4, CO2R4, SOmR4, SOnR4R5; m = 0-2; n = 1-2.  $\beta$ 3-AR EC50 and IA (% activity compound/% activity isoproterenol) values are reported for 4 of the claimed compds. (e.g. 40.0 nM and 1.1, resp. for [7-[4-[(2R)-2-hydroxy-2-(4-hydroxy-3-methanesulfonylamino]phenyl)ethylamino]methyl]phenyl]-2-oxo-1,2,3,4-tetrahydroquinolin-3-yl]acetic acid Me ester). Although the methods of preparation are not claimed, 4 example prepns. are included.

IT 433926-85-3P, Methyl (1,2,3,4-tetrahydro-6-hydroxy-2-oxoquinolin-3-yl)acetate 433926-86-4P, Methyl (1,2,3,4-tetrahydro-2-oxo-6-(((trifluoromethyl)sulfonyl)oxy)quinolin-3-yl)acetate  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; for preparation of tetrahydroquinolinones useful as selective beta-3 adrenergic receptor agonists)  
 RN 433926-85-3 CAPLUS  
 CN 3-Quinolineacetic acid, 1,2,3,4-tetrahydro-6-hydroxy-2-oxo-, methyl ester (CA INDEX NAME)



RN 433926-86-4 CAPLUS  
 CN 3-Quinolineacetic acid, 1,2,3,4-tetrahydro-2-oxo-6-  
 [[(trifluoromethyl)sulfonyl]oxy]-, methyl ester (CA INDEX NAME)



L32 ANSWER 27 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:408626 CAPLUS

DOCUMENT NUMBER: 136:401535

TITLE: Derivatives of 4-hydroxybutanoic acid and of its higher homologue as ligands of  $\gamma$ -hydroxybutyrate (GHB) receptors, pharmaceutical compositions containing same and pharmaceutical uses

INVENTOR(S): Bourguignon, Jean-Jacques; Maitre, Michel; Klotz, Evelyne; Schmitt, Martine; Gobaille, Serge; Macher, Jean-Paul

PATENT ASSIGNEE(S): Universite Louis Pasteur (Etablissement Public A Caractere Scientifique, Culturel Et Professionnel), Fr.

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

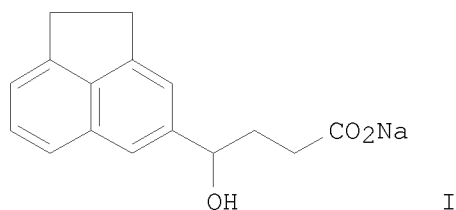
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

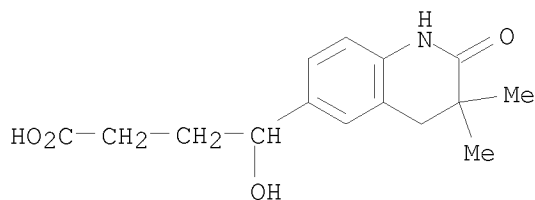
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002042250	A1	20020530	WO 2001-FR3615	20011116
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2817256	A1	20020531	FR 2000-15291	20001127
FR 2817256	B1	20050715		
AU 2002020792	A	20020603	AU 2002-20792	20011116
EP 1347950	A1	20031001	EP 2001-997471	20011116
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 20050113366	A1	20050526	US 2003-432692	20031124
PRIORITY APPLN. INFO.:			FR 2000-15291	A 20001127
			WO 2001-FR3615	W 20011116

OTHER SOURCE(S): MARPAT 136:401535

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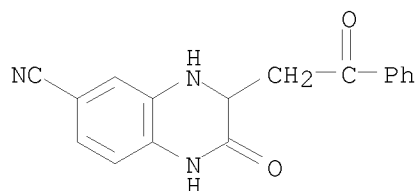


- AB The invention concerns novel derivs. of 4-hydroxybutanoic acid and its higher homolog, 5-hydroxypentanoic acid, their crotonic homologs, pharmaceutical compns. containing them and their pharmaceutical uses. In particular, compds. Ar-(CH<sub>2</sub>)<sub>n</sub>-CH(OH)-X-W (I) are claimed [wherein: Ar = certain (un)substituted mono-, bi-, and tricyclic aromatic and heteroarom. ring systems; n = 0 or 1; X = (CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>, or trans-CH:CH; W = CO<sub>2</sub>H or pharmaceutically acceptable salt, CH<sub>2</sub>OH, alkoxycarbonyl, SO<sub>3</sub>H, PO<sub>3</sub>H<sub>2</sub>, tetrazol-5-yl, N-(2,6-dimethylphenylsulfonyl)carbamoyl, CONR<sup>7</sup>R<sup>8</sup>, CO<sub>2</sub>CHR<sup>9</sup>CO<sub>2</sub>R<sup>10</sup>; R<sup>7</sup>, R<sup>8</sup> = H, alkyl, aryl, aralkyl, or OH; R<sup>9</sup> = H, Me; R<sup>10</sup> = Et, C<sub>12</sub>H<sub>15</sub>, or adamantyl]. I are capable of binding with  $\gamma$ -hydroxybutyrate (GHB)-specific receptors, and are capable of exhibiting agonist or antagonist properties. The compds. are potentially useful for treating a wide variety of conditions. In particular, I are useful for treating sleep disorders, anxiety, and general diseases of the central nervous system. Over 40 compds. were prepared. Preps. generally involved production of 4-(hetero)aryl-4-oxobutanoate esters by different routes, followed by borohydride reduction of the ketone, hydrolysis of the ester, and salification. Compds. I displaced 3H-GHB from rat brain GHB receptors in vitro with IC<sub>50</sub> values ranging from 34.2  $\mu$ M to 0.08  $\mu$ M (the latter for compound II). In an EEG test in rats, II gave a 23-28% increase in the duration of slow wave sleep (SWS) at doses of 0.15-0.28  $\mu$ mol/kg i.p.
- IT 430440-65-6P, 4-(3,3-Dimethyl-2-oxo-1,2,3,4-tetrahydroquinolin-6-yl)-4-hydroxybutanoic acid sodium salt  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (drug candidate; preparation of aryl and heteroaryl hydroxybutanoic acid derivs. and homologs as GHB receptor agonists and antagonists)
- RN 430440-65-6 CAPLUS
- CN 6-Quinolinebutanoic acid, 1,2,3,4-tetrahydro- $\gamma$ -hydroxy-3,3-dimethyl-2-oxo-, monosodium salt (9CI) (CA INDEX NAME)

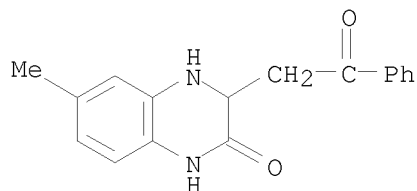


REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

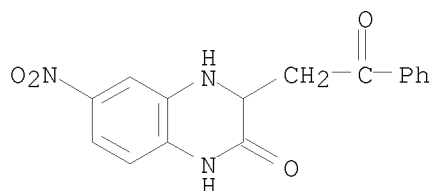
ACCESSION NUMBER: 2002:283030 CAPLUS  
 DOCUMENT NUMBER: 137:169472  
 TITLE: The reaction of benzoylacrylic acid with  
 ortho-phenylenediamines  
 AUTHOR(S): Kolos, N. N.; Tishchenko, A. A.; Orlov, V. D.;  
 Berezkina, T. V.; Shishkina, S. V.; Shishkin, O. V.  
 CORPORATE SOURCE: V. N. Karazin National University, Kharkov, 61077,  
 Ukraine  
 SOURCE: Chemistry of Heterocyclic Compounds (New York, NY,  
 United States)(Translation of Khimiya  
 Geterotsiklicheskikh Soedinenii) (2001), 37(10),  
 1289-1295  
 CODEN: CHCCAL; ISSN: 0009-3122  
 PUBLISHER: Kluwer Academic/Consultants Bureau  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 137:169472  
 AB The reaction of  $\beta$ -benzoylacrylic acid with substituted  
 o-phenylenediamines gives substituted quinoxal-2-ones. The structure of  
 one of the products, 3-phenacylquinoxal-2-one, which was produced in 61%  
 yield, was proved using x-ray anal.  
 IT 448959-30-6P 448959-34-0P 448959-36-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 448959-30-6 CAPLUS  
 CN 6-Quinoxalinecarbonitrile, 1,2,3,4-tetrahydro-2-oxo-3-(2-oxo-2-  
 phenylethyl)- (CA INDEX NAME)



RN 448959-34-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methyl-3-(2-oxo-2-phenylethyl)- (CA  
 INDEX NAME)



RN 448959-36-2 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-nitro-3-(2-oxo-2-phenylethyl)- (CA  
 INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 29 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:185847 CAPLUS  
 DOCUMENT NUMBER: 136:369684  
 TITLE: A Novel Palladium-Catalyzed Synthesis of  
 1,2-Dihydroquinoxalines and 3,4-Dihydroquinoxalinones  
 AUTHOR(S): Soederberg, Bjoern C. G.; Wallace, Jeffery M.;  
 Tamariz, Joaquin  
 CORPORATE SOURCE: Department of Chemistry, West Virginia University,  
 Morgantown, WV, 26506-6045, USA  
 SOURCE: Organic Letters (2002), 4(8), 1339-1342  
 CODEN: ORLEF7; ISSN: 1523-7060  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 136:369684

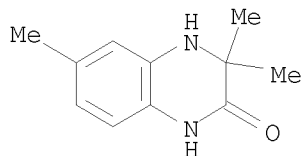
AB Reactions of enamines, derived from 2-nitroanilines and  
 $\alpha$ -substituted aldehydes, with carbon monoxide (6 atm) in the  
 presence of a catalytic amount of bis(dibenzylideneacetone)palladium(0)  
 (Pd(dba)<sub>2</sub>) and 1,3-bis(diphenylphosphino)propane (dppp) afford readily  
 separated mixts. of 1,2-dihydroquinoxalines and 3,4-dihydroquinoxalinones.  
 Addition of a catalytic amount of 1,10-phenanthroline to the reaction mixture  
 substantially improved the yield of products.

IT 81016-65-1P 146739-29-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (reaction of enamines with carbon monoxide catalyzed by  
 bis(dibenzylideneacetone)palladium)

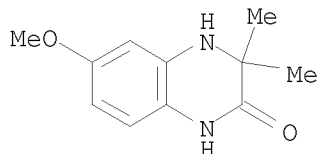
RN 81016-65-1 CAPLUS

CN 2(1H)-Quinoxalinone, 3,4-dihydro-3,3,6-trimethyl- (CA INDEX NAME)



RN 146739-29-9 CAPLUS

CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3,3-dimethyl- (CA INDEX NAME)





REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 30 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:71158 CAPLUS

DOCUMENT NUMBER: 136:278990

TITLE: Enantioselective photocyclization of p-toluidides of  $\alpha,\beta$ -unsaturated carboxylic acids in solution. A mechanistic and preparative study

AUTHOR(S): Formentin, Pilar; Sabater, Maria J.; Chretien, Michelle N.; Garcia, Hermenegildo; Scaiano, Juan C.

CORPORATE SOURCE: Instituto de Tecnologia Quimica CSIC-UPV, Universidad Politecnica de Valencia, Valencia, 46071, Spain

SOURCE: Journal of the Chemical Society, Perkin Transactions 2 (2002), (1), 164-167

CODEN: JCSPGI; ISSN: 1472-779X

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:278990

AB Photolysis of p-toluidides of methacrylic (1a) and 1-cyclohexene-1-carboxylic (1b) acids in nitrogen-saturated cyclopentane solution yields the corresponding 2-quinolones with over 90% chemoselectivity at almost complete conversion. In the presence of substoichiometric amts. (0.1 equiv) of chiral inductor, low to moderate enantiomeric excesses (ee) are observed in the photo-product. Ephedrine gave the highest ee (37% ee for the photocyclization of 1a) in a series of 11 chiral inductors including alcs., amines, aminoalcs.,  $\alpha$ -amino and  $\alpha$ -hydroxy acids. In the case of the irradiation of 1b in the presence of chiral inductors, both diastereo- and enantioselectivity were observed. A weakly absorbing transient species ( $\lambda_{\max}$  400 nm) was detected following 308 nm laser excitation and was assigned to the zwitterionic enolate intermediate resulting immediately after the concerted electrocyclic ring closure. The lifetime of this intermediate is unaffected by oxygen but is quenched by trifluoroacetic acid ( $k_q = 3.76 \times 10^7 \text{ M}^{-1} \text{ s}^{-1}$ ) and ephedrine ( $k_q = 1.19 \times 10^7 \text{ M}^{-1} \text{ s}^{-1}$ ).

IT 405937-28-2P

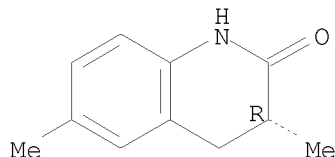
RL: SPN (Synthetic preparation); PREP (Preparation)

(mechanistic and preparative study of enantioselective photocyclization of p-toluidides of  $\alpha,\beta$ -unsatd. carboxylic acids in solution)

RN 405937-28-2 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-3,6-dimethyl-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

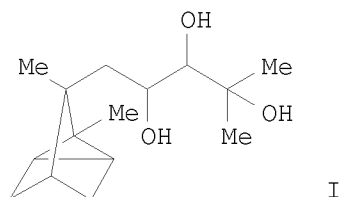
L32 ANSWER 31 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:897296 CAPLUS

DOCUMENT NUMBER: 136:147846

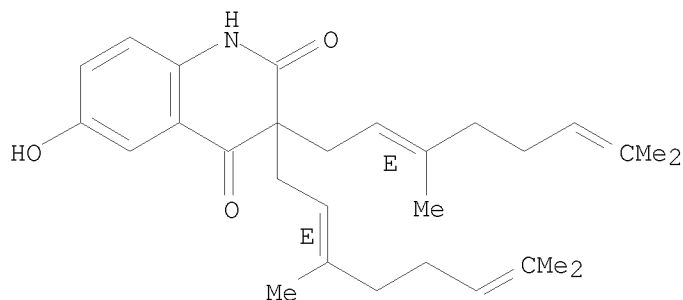
TITLE: A new sesquiterpene,  $\alpha$ -santalane-11,12,13-triol from the root bark of *Severinia buxifolia* in Hainan

AUTHOR(S): Chen, Chien-Mao; Lin, Fu-Wen; Kuo, Ping-Chung; Shi, Li-Shian; Wang, Jhi-Joung; Wu, Tian-Shung  
 CORPORATE SOURCE: Department of Chemistry, National Cheng Kung University, Tainan, Taiwan  
 SOURCE: Journal of the Chinese Chemical Society (Taipei, Taiwan) (2001), 48(5), 933-936  
 CODEN: JCCTAC; ISSN: 0009-4536  
 PUBLISHER: Chinese Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB A new sesquiterpenoid,  $\alpha$ -santalane-11,12,13-triol (I), together with thirty known compds. were isolated and characterized from the root bark of *Severinia buxifolia* in Hainan. Their structures were determined by spectroscopic methods. The relationship between constituents and collecting area is also discussed.  
 IT 219998-24-0, Severibuxine  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (from *Severinia buxifolia*)  
 RN 219998-24-0 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 3,3-bis[(2E)-3,7-dimethyl-2,6-octadienyl]-6-hydroxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 32 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001:244781 CAPLUS  
 DOCUMENT NUMBER: 135:55436  
 TITLE: Formation of a defluorinated metabolite of a quinoxaline antiviral drug catalysed by human cytochrome P450 1A2  
 AUTHOR(S): Mutch, Peter J.; Dear, Gordon J.; Ismail, Issy M.  
 CORPORATE SOURCE: Division of Bioanalysis and Drug Metabolism, Glaxo Wellcome Research and Development, Ware, SG12 0DP, UK

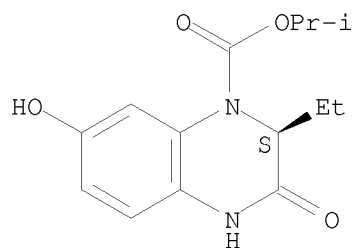
SOURCE: Journal of Pharmacy and Pharmacology (2001), 53(3), 403-408  
 CODEN: JPPMAB; ISSN: 0022-3573  
 PUBLISHER: Pharmaceutical Press  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The in-vitro metabolism of GW420867X ((S)-2-ethyl-7-fluoro-3-oxo-3,4-dihydro-2H-quinoxaline-1-carboxylic acid iso-Pr ester), a quinoxaline drug for the potential treatment of HIV, has been studied with singly expressed human cytochromes P 450 (CYP 450). No biotransformation of [14C]GW420867X was evident in the presence of any of the CYP 450 isoforms, with the exception of CYP 450 1A2, where a single metabolite was observed in the HPLC radiochromatograms of enzyme incubations with the test compound. The structure of this metabolite was determined by NMR spectroscopy and mass spectrometry, and was shown to correspond to the replacement of the aromatic fluorine of GW420867X with a hydroxyl group. Thus, it appeared that CYP 450 1A2 catalyzed the specific defluorination of GW420867X, presumably during formation of an arene oxide intermediate during aromatic hydroxylation.

IT 178041-13-9  
 RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)  
 (formation of a defluorinated metabolite of a quinoxaline antiviral drug catalyzed by human cytochrome P 450 1A2)

RN 178041-13-9 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 2-ethyl-3,4-dihydro-7-hydroxy-3-oxo-, 1-methylethyl ester, (2S)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 33 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000:618377 CAPLUS  
 DOCUMENT NUMBER: 133:290626  
 TITLE: Urinary metabolites of a novel quinoxaline non-nucleoside reverse transcriptase inhibitor in rabbit, mouse and human: identification of fluorine NIH shift metabolites using NMR and tandem MS

AUTHOR(S): Dear, G. J.; Ismail, I. M.; Mutch, P. J.; Plumb, R. S.; Davies, L. H.; Sweatman, B. C.

CORPORATE SOURCE: International Development, Bioanalysis and Drug Metabolism Division, Glaxo Wellcome Research and Development, Ware, SG12 0DP, UK

SOURCE: Xenobiotica (2000), 30(4), 407-426  
 CODEN: XENOBH; ISSN: 0049-8254

PUBLISHER: Taylor & Francis Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

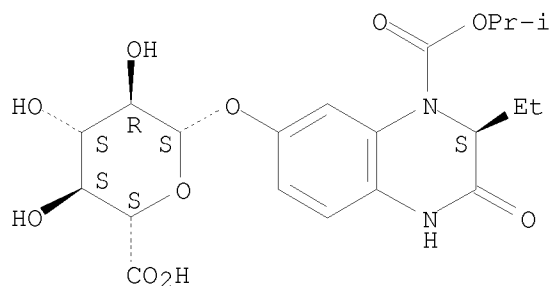
AB 1. The urinary metabolites of (S)-2-ethyl-7-fluoro-3-oxo-3,4-dihydro-2H-quinoxaline-carboxylic acid isopropylester (GW420867X) have been investigated in samples obtained following oral administration to rabbit, mouse and human. GW420867X underwent extensive biotransformation to form hydroxylated metabolites and glucuronide conjugates on the aromatic ring, and on the Et and iso-Pr side-chains in all species. In rabbit urine, a minor metabolite was detected and characterized as a cysteine adduct that was not observed in mouse or man. 2. The hydroxylated metabolites and corresponding glucuronide conjugates were isolated by semi-preparative HPLC and characterized using NMR, LC-NMR and LC-MS/MS. The relative proportions of fluorine-containing metabolites were determined in animal species by <sup>19</sup>F-NMR signal integration. 3. The fluorine atom of the aromatic ring underwent NIH shift rearrangement in the metabolites isolated and characterized in rabbit, mouse and human urine. 4. The characterization of the NIH shift metabolites in urine enabled the detection and confirmation of the presence of these metabolites in human plasma.

IT 234448-19-2P  
 RL: BSU (Biological study, unclassified); MFM (Metabolic formation); PUR (Purification or recovery); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation)  
 (identification of urinary metabolites of a novel quinoxaline non-nucleoside reverse transcriptase inhibitor (GW420867X) in rabbit, mouse and human by using NMR and tandem MS)

RN 234448-19-2 CAPLUS

CN β-D-Glucopyranosiduronic acid, (3S)-3-ethyl-1,2,3,4-tetrahydro-4-[(1-methylethoxy)carbonyl]-2-oxo-6-quinoxaliny (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 34 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:496110 CAPLUS

DOCUMENT NUMBER: 133:261082

TITLE: The design and synthesis of thrombin inhibitors: the introduction of in vivo efficacy and oral bioavailability into benzthiazolylalanine inhibitors

AUTHOR(S): Hayler, J.; Kane, P. D.; LeGrand, D.; Lugrin, F.; Menear, K.; Price, R.; Allen, M.; Cockcroft, X.; Ambler, J.; Butler, K.; Dunnet, K.; Mitchelson, A.; Talbot, M.; Tweed, M.; Wills, N.

CORPORATE SOURCE: Novartis Horsham Research Centre, Horsharn, West Sussex, RH12 4AB, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(14), 1567-1570  
 CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The further optimization of the novel lead compound CGH752 is described. By introducing various substituents into the 6-position of the 3,3-dimethyltetrahydroquinoline (DMTHQS) ring we have been able to favorably affect the in vitro and in vivo activity, and the pharmacokinetics of such compds. One of the inhibitors synthesized, CGH1484 is bioavailable and shows efficacy in animal models of thrombosis.

IT 184041-58-5P 184041-62-1P 184041-89-2P

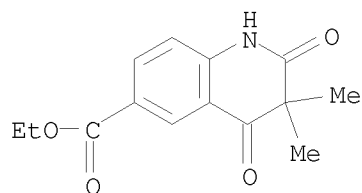
202465-00-7P 296242-11-0P 296242-12-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and thrombin-inhibitory structure activity relations of benzthiazolylalanine analogs and bioavailability and efficacy in animal models of thrombosis)

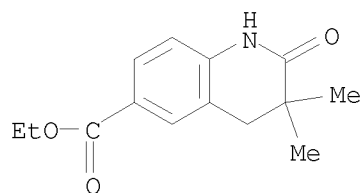
RN 184041-58-5 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo-, ethyl ester (CA INDEX NAME)



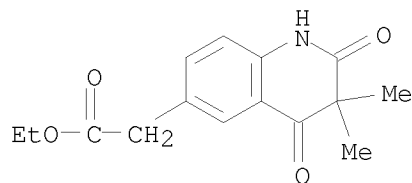
RN 184041-62-1 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)



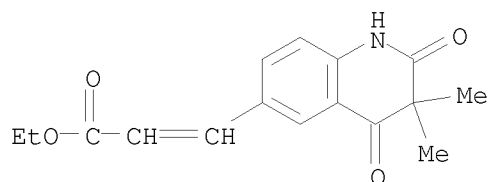
RN 184041-89-2 CAPLUS

CN 6-Quinolineacetic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo-, ethyl ester (CA INDEX NAME)

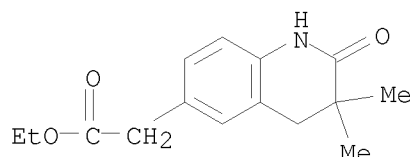


RN 202465-00-7 CAPLUS

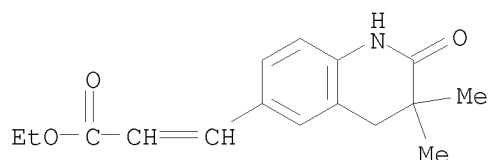
CN 2-Propenoic acid, 3-(1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo-6-quinolinyl)-, ethyl ester (CA INDEX NAME)



RN 296242-11-0 CAPLUS  
 CN 6-Quinolineacetic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)



RN 296242-12-1 CAPLUS  
 CN 2-Propenoic acid, 3-(1,2,3,4-tetrahydro-3,3-dimethyl-2-oxo-6-quinolinyl)-, ethyl ester (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 35 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:667015 CAPLUS

DOCUMENT NUMBER: 132:8685

TITLE: Urinary metabolites of a novel quinoxaline nonnucleoside reverse transcriptase inhibitor in dog, cynomolgus monkey and mini-pig

AUTHOR(S): Ismail, I. M.; Dear, G. J.; Mutch, P. J.; Davies, L. H.; Plumb, R. S.; Sweatman, B. C.

CORPORATE SOURCE: Glaxo Wellcome Research and Development, International Development BioMet, Ware, SG12 0DP, UK

SOURCE: Xenobiotica (1999), 29(9), 957-967

CODEN: XENOBH; ISSN: 0049-8254

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The metabolism of (S)-2-ethyl-7-fluoro-3-oxo-3,4-dihydro-2H-quinoxaline-carboxylic acid isopropylester (GW420867X) has been investigated following oral administration to dog, cynomolgus monkey and mini-pig. The urinary metabolites were isolated and characterized using semi-preparative HPLC, NMR and LC-MS/MS. The relative proportions of fluorine-containing metabolites were determined for each species by <sup>19</sup>F-NMR signal integration. The metabolite profiles for each species were similar, although the proportion of individual components varied, suggesting that similar metabolic pathways

are involved in the biotransformation of GW420867X in the species studied. The urinary metabolites indicated that the major routes of biotransformation included hydroxylation and subsequent glucuronic acid conjugation on the aromatic ring, and on the Et and iso-Pr side chains. A component was observed in mini-pig urine that corresponded to hydroxylation and glucuronidation accompanied by loss of the fluorine atom.

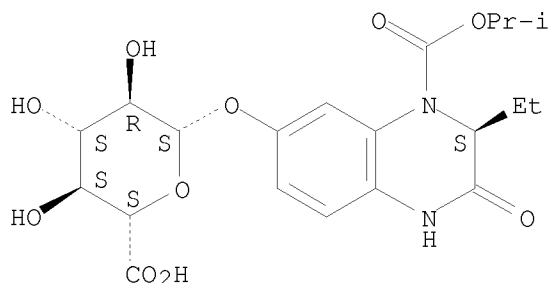
IT 234448-19-2

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process); USES (Uses)  
(urinary metabolites of GW420867X in dog, cynomolgus monkey and mini-pig)

RN 234448-19-2 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, (3S)-3-ethyl-1,2,3,4-tetrahydro-4-[(1-methylethoxy)carbonyl]-2-oxo-6-quinoxaliny (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 36 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:348465 CAPLUS

DOCUMENT NUMBER: 131:124853

TITLE: The use of preparative high-performance liquid chromatography with tandem mass spectrometric directed fraction collection for the isolation and characterization of drug metabolites in urine by nuclear magnetic resonance spectroscopy and liquid chromatography/sequential mass spectrometry

AUTHOR(S): Plumb, R. S.; Ayrton, J.; Dear, G. J.; Sweatman, B. C.; Ismail, I. M.

CORPORATE SOURCE: International Development Support, BioMet, Glaxo Wellcome Research and Development, Herts, SG12 ODJ, UK

SOURCE: Rapid Communications in Mass Spectrometry (1999), 13(10), 845-854

CODEN: RCMSEF; ISSN: 0951-4198

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Preparative HPLC coupled to tandem mass spectrometry has been used successfully for the isolation of several drug metabolites from urine. NMR spectroscopy has been employed to determine the exact chemical structure of these metabolites. The use of preparative HPLC has allowed the isolation of relatively large quantities of drug metabolites (>0.5 mg) allowing insensitive, information-rich NMR expts. such as NOE, HMBC and HMQC to be performed. The coupling of the ion-trap mass spectrometer, operating in automatic MS/MS mode, to preparative HPLC allows the simultaneous collection and mass spectrometric anal. of eluting analytes to be

performed, thus allowing the position of fractions containing drug-related material to be identified very rapidly.

IT 234448-19-2

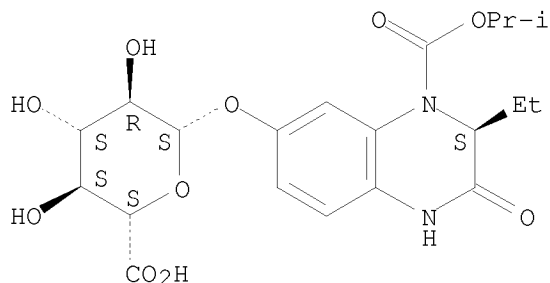
RL: ANT (Analyte); ANST (Analytical study)

(adaptation of preparative HPLC with tandem mass spectrometric directed fraction collection for qual. anal. of drug metabolites in urine by NMR spectroscopy and liquid chromatog./sequential mass spectrometry)

RN 234448-19-2 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, (3S)-3-ethyl-1,2,3,4-tetrahydro-4-[(1-methylethoxy)carbonyl]-2-oxo-6-quinoxaliny (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 37 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:785066 CAPLUS

DOCUMENT NUMBER: 130:136592

TITLE: Severibuxine, a new quinoline-2,4-dione and other constituents from *Severinia buxifolia*

AUTHOR(S): Wu, Tian-Shung; Leu, Yann-Lii; Chan, Yu-Yi; Lin, Ful-Wen; Li, Chia-Ying; Shi, Li-Shian; Kuo, Shang-Chu; Chen, Chieh-Fu; Wu, Yang-Chang

CORPORATE SOURCE: Department of Chemistry, Cheng Kung University, Tainan, 710, Taiwan

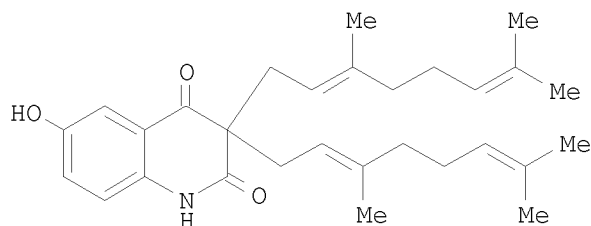
SOURCE: *Phytochemistry* (1998), 49(5), 1467-1470  
CODEN: PYTCAS; ISSN: 0031-9422

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I

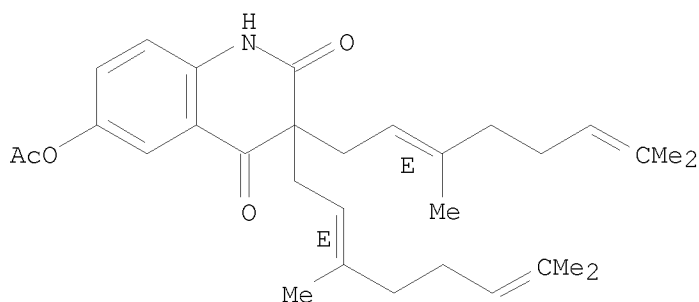
AB A new quinolin-2,4-dione alkaloid, severibuxine (I), together with 23 known compds. were isolated from the root bark of *Severinia buxifolia*. The structure of these compds. were determined by spectral and chemical methods.



Most of them showed cytotoxic activity against P-388.

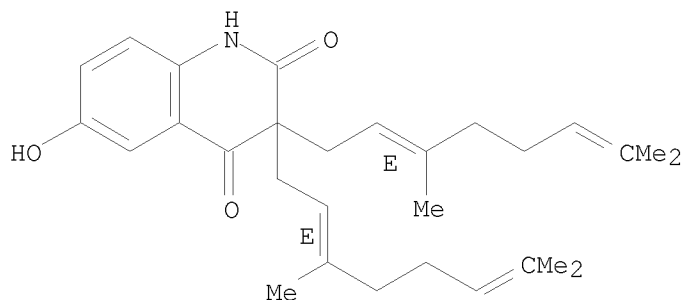
IT 219998-25-1P, Severibuxine acetate  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(isolation of severibuxine, a quinoline-2,4-dione alkaloid, and other  
constituents from *Severinia buxifolia*)  
RN 219998-25-1 CAPLUS  
CN 2,4(1H,3H)-Quinolinedione, 6-(acetyloxy)-3,3-bis[(2E)-3,7-dimethyl-2,6-  
octadienyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IT 219998-24-0P, Severibuxine  
RL: BAC (Biological activity or effector, except adverse); BOC (Biological  
occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR  
(Purification or recovery); RCT (Reactant); BIOL (Biological study); OCCU  
(Occurrence); PREP (Preparation); RACT (Reactant or reagent)  
(isolation of severibuxine, a quinolinedione alkaloid, and other  
constituents from *Severinia buxifolia*)  
RN 219998-24-0 CAPLUS  
CN 2,4(1H,3H)-Quinolinedione, 3,3-bis[(2E)-3,7-dimethyl-2,6-octadienyl]-6-  
hydroxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

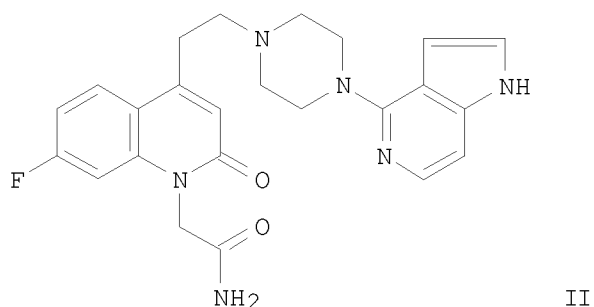
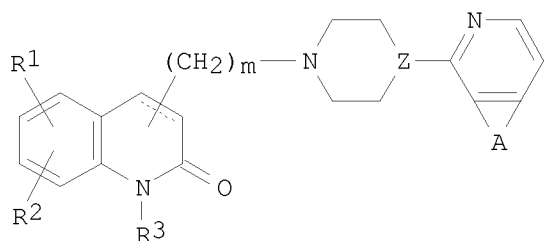


REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 38 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1998:672552 CAPLUS  
DOCUMENT NUMBER: 129:275934  
TITLE: Quinolin-2(1H)-one and dihydroquinolin-2(1H)-one  
derivatives as ligands of 5-HT, 5-HT2 and 5-HT1-like  
receptors  
INVENTOR(S): McCort, Gary; Hoornaert, Christian; Cadilhac,  
Caroline; Duclos, Olivier; Guilpain, Eric  
PATENT ASSIGNEE(S): Synthelabo, Fr.

SOURCE: PCT Int. Appl., 89 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9842712	A1	19981001	WO 1998-FR528	19980317
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2761071	A1	19980925	FR 1997-3387	19970320
FR 2761071	B1	19991203		
AU 9869239	A	19981020	AU 1998-69239	19980317
EP 971928	A1	20000119	EP 1998-914928	19980317
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
ZA 9802362	A	19980923	ZA 1998-2362	19980319
IN 1998CA00452	A	20051202	IN 1998-CA452	19980319
PRIORITY APPLN. INFO.:			FR 1997-3387	A 19970320
			WO 1998-FR528	W 19980317
OTHER SOURCE(S):		MARPAT 129:275934		
GI				



AB The invention concerns compds. I [dashed line = single or double bond; major sidechain is in position 3 or 4; Z = N or CH; R1, R2 = H, halo, amino, OH, NO2, cyano, (C1-6) alkyl, (C1-6) alkoxy, CF3, CF3O, COOH, COOR4, CONH2, CONHR4, CONR4R5, SR4, SO2R4, NHCOR4, NHSO2R4, N(R4)2; R3 =

H, (C1-4) alkyl, (CH<sub>2</sub>)pOH, (CH<sub>2</sub>)pNH<sub>2</sub>, (CH<sub>2</sub>)nCOOH, (CH<sub>2</sub>)nCOOR<sub>4</sub>, (CH<sub>2</sub>)nCN, (CH<sub>2</sub>)n-tetrazolyl, (CH<sub>2</sub>)nCONH<sub>2</sub>, (CH<sub>2</sub>)nCONHOH, (CH<sub>2</sub>)pSH, (CH<sub>2</sub>)nSO<sub>3</sub>H, (CH<sub>2</sub>)nSO<sub>2</sub>NH<sub>2</sub>, (CH<sub>2</sub>)nSO<sub>2</sub>NHR<sub>4</sub>, (CH<sub>2</sub>)nSO<sub>2</sub>NR<sub>4</sub>R<sub>5</sub>, (CH<sub>2</sub>)nCONHR<sub>4</sub>, (CH<sub>2</sub>)nCONR<sub>4</sub>R<sub>5</sub>, (CH<sub>2</sub>)pNH<sub>2</sub>SO<sub>2</sub>R<sub>4</sub>, (CH<sub>2</sub>)pNHCOR<sub>4</sub>, (CH<sub>2</sub>)pOCOR<sub>4</sub>; R<sub>4</sub>, R<sub>5</sub> = (C1-4) alkyl; m = 2-4; n = 1-4; p = 2-4; A = optional (un)substituted benzo or hetero fusion; with provisos] and salts. The compds. are antagonists of serotonergic receptors, notably 5-HT<sub>2</sub> or 5-HT<sub>1</sub>-like subtypes. The invention is thereby applicable in therapeutics, particularly for treatment or prevention of cardiovascular pathologies such as ischemias, angina, thromboses, atherosclerosis, various hypertension, and vasospasms. For instance, 4-(2-chloroethyl)-7-fluoro-2-oxo-1,2-dihydroquinoline-1-acetamide (prepared in 6 steps) was coupled with 4-(piperazin-1-yl)-1H-pyrrolo[3,2-c]pyridine (prepared in 8 steps) using NaHCO<sub>3</sub> and KI in MeCN-DMF mixture at 70°, followed by acidification with HCl in Et<sub>2</sub>O, to give title compound II.2HCl in 64% yield. In a test for inhibition of [3H]-spiroperidol specific binding to rat cerebral 5-HT<sub>2</sub> receptors in vitro, I had IC<sub>50</sub> values of < 1 μM.

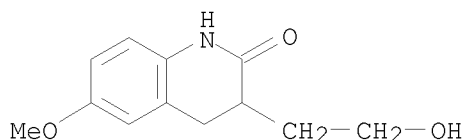
IT 190203-90-8P 214045-69-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of piperazinylalkyl quinolinone and dihydroquinolinone derivs. as serotonergic antagonists)

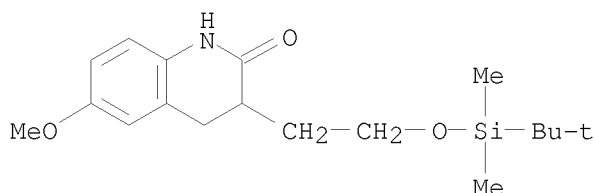
RN 190203-90-8 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-3-(2-hydroxyethyl)-6-methoxy- (CA INDEX NAME)



RN 214045-69-9 CAPLUS

CN 2(1H)-Quinolinone, 3-[2-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]-3,4-dihydro-6-methoxy- (CA INDEX NAME)

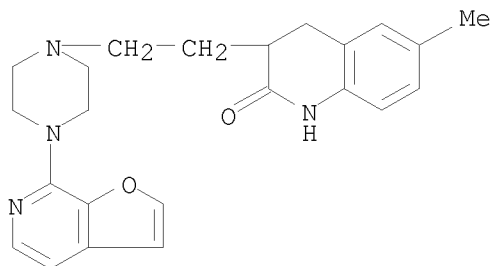


IT 214044-86-7P 214044-87-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of piperazinylalkyl quinolinone and dihydroquinolinone derivs. as serotonergic antagonists)

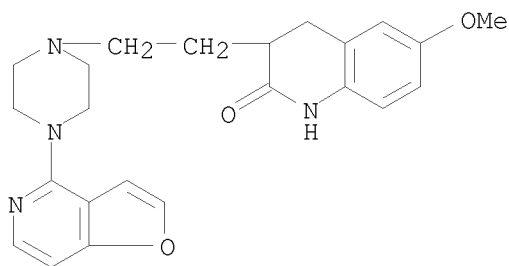
RN 214044-86-7 CAPLUS

CN 2(1H)-Quinolinone, 3-[2-(4-furo[2,3-c]pyridin-7-yl-1-piperazinyl)ethyl]-3,4-dihydro-6-methyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

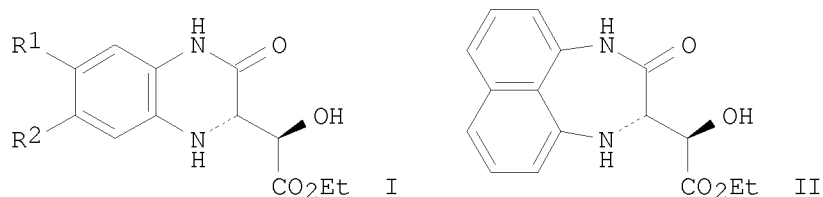
RN 214044-87-8 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[2-(4-furo[3,2-c]pyridin-4-yl-1-piperazinyl)ethyl]-  
 3,4-dihydro-6-methoxy-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 39 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1998:320754 CAPLUS  
 DOCUMENT NUMBER: 129:54343  
 TITLE: Optically active  $\alpha$ -hydroxy- $\alpha$ -(  
 (tetrahydroquinoxalin-3-on-2-yl) esters by ring  
 transformation of (R,R)-diethyl oxirane-2,3-  
 dicarboxylate  
 AUTHOR(S): Woydowski, Karsten; Ziemer, Burkhardt; Liebscher,  
 Jurgon  
 CORPORATE SOURCE: Institut fur Chemie, Humboldt-Universitat Berlin,  
 Berlin, D-10115, Germany  
 SOURCE: Tetrahedron: Asymmetry (1998), 9(7), 1231-1237  
 CODEN: TASYE3; ISSN: 0957-4166  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB The reaction of (R,R)-diethyl oxirane-2,3-dicarboxylate with o-phenylenediamines and 1,8-diaminonaphthalene gave optically active (2R,2'S)-quinoxalinyllacetates (I; R1 = H, Me, MeO; R2 = H, Me, NO2, CF3) and (2R,2'S)-naphthodiazepinyllacetate II, resp., in a regio- and stereoselective manner. The regiochem. of the reactions with o-phenylenediamines was discussed. Together with previous investigations in this field the present results demonstrate a dependence of the mode of the reaction of glycidates with o-phenylenediamines on the substituents on the glycidate.

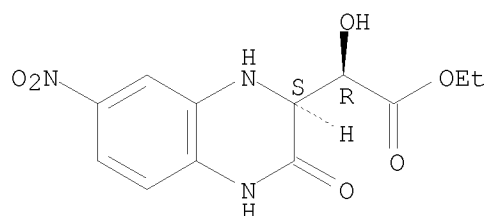
IT 208448-98-0P 208448-99-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 208448-98-0 CAPLUS

CN 2-Quinoxalineacetic acid, 1,2,3,4-tetrahydro- $\alpha$ -hydroxy-7-nitro-3-oxo-, ethyl ester, ( $\alpha$ R,2S)- (CA INDEX NAME)

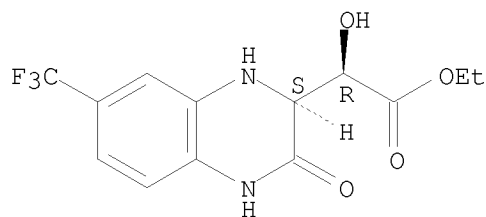
Absolute stereochemistry. Rotation (+).



RN 208448-99-1 CAPLUS

CN 2-Quinoxalineacetic acid, 1,2,3,4-tetrahydro- $\alpha$ -hydroxy-3-oxo-7-(trifluoromethyl)-, ethyl ester, ( $\alpha$ R,2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 40 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:129595 CAPLUS

DOCUMENT NUMBER: 128:140693

TITLE: Preparation of N-( $\alpha$ -carboxy- $\alpha$ -

benothiazolylmethyl)tetrahydroquinolinesulfonamides as inhibitors of trypsin and thrombin

INVENTOR(S): Brundish, Derek Edward; Kane, Peter Daniel; Walker, Clive Victor; Menear, Keith Allan; Le Grand, Darren Mark; Allen, Mark Christopher; Hayler, Judy D.; Herold, Peter; Butler, Paul Ian; Fullerton, Joseph Dawson; Smith, Garrick Paul; Wathey, William Bernard; Cockcroft, Xiao-Ling; Hatto, Julia Doris Ida

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Brit. UK Pat. Appl., 86 pp.  
CODEN: BAXXDU

DOCUMENT TYPE: Patent

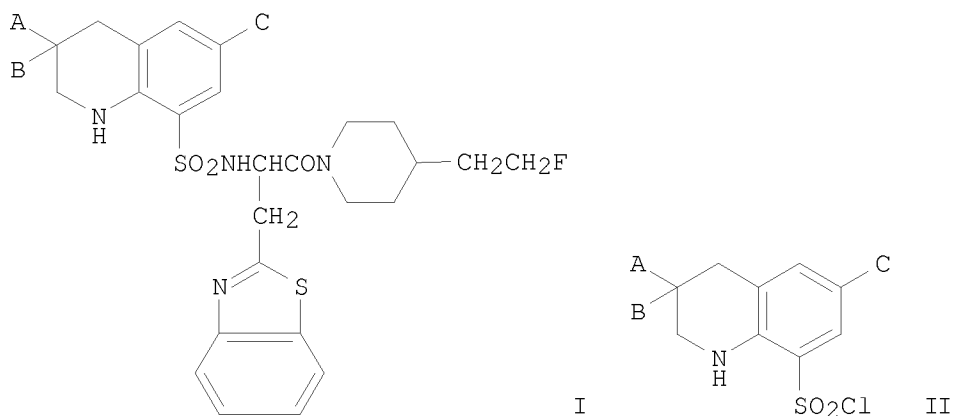
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2312674	A	19971105	GB 1996-9187	19960502
PRIORITY APPLN. INFO.:			GB 1996-9187	19960502
OTHER SOURCE(S):	MARPAT 128:140693			

GI



AB Compds. of the general formula (I; A, B = H, a C1-5 alkyl which may be interrupted by one or more oxygen atoms, C1-5 alkenyl, alkoxyalkyl, hydroxyalkyl, alkylthioalkyl, alkylamino, dialkylamino or trialkylamino, or together form a methylene group, or together with the carbon atom to which they are attached form a C1-7 carboxylic ring; C = a group -R-X in which R is a C1-4 alkylene group optionally interrupted by oxygen or is a direct bond; X = an aminocarbonyl, carbonylamino, sulfonylamino, amino, azido or heterocyclic alkyl, or salts thereof) and their novel intermediates thereof (II; A, B, C = same as above) are prepared. They are potent and orally bioavailable inhibitors of serine protease, especially trypsin and thrombin, and are useful for the treatment and prophylaxis of various diseases attributed to thrombin-mediated or thrombin-associated actions and processes including thrombotic diseases such as myocardial infarction, stroke, pulmonary embolism, deep vein thrombosis, etc. They are also used for decreasing the dosage of a thrombotic agent required to establish reperfusion or prevent reocclusion in a patient. Thus, 3-(1,2,3,4-tetrahydroquinolin-6-yl)propionic acid derivative I (A = B = Me, C = CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H) was heated with (PhO)<sub>2</sub>P(O)N<sub>3</sub> and Et<sub>3</sub>N in toluene at 100° for 2 h and the resulting oil I (A = B = Me, C = CH<sub>2</sub>CH<sub>2</sub>NCO)

was stirred with MeNH<sub>2</sub> in CH<sub>2</sub>Cl<sub>2</sub> at 20° for 1 h to give I (A = B = Me, C = CH<sub>2</sub>CH<sub>2</sub>NHCONHMe). The title compds. I in vitro inhibited human thrombin with K<sub>i</sub> values of 18-86 nM.

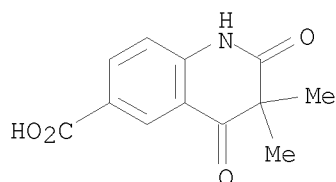
IT 184041-54-1P 184041-58-5P 184041-62-1P  
184041-89-2P 184042-06-6P 184042-08-8P  
184042-09-9P 202465-00-7P 202465-54-1P  
202465-63-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N-( $\alpha$ -carboxy- $\alpha$ -benothiazolylmethyl)tetrahydroquinolinesulfonamides as inhibitors of trypsin and thrombin and antithrombotics)

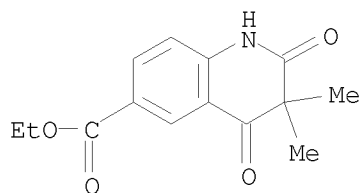
RN 184041-54-1 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo- (CA INDEX NAME)



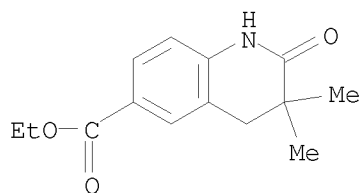
RN 184041-58-5 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo-, ethyl ester (CA INDEX NAME)



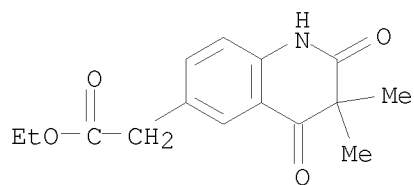
RN 184041-62-1 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)



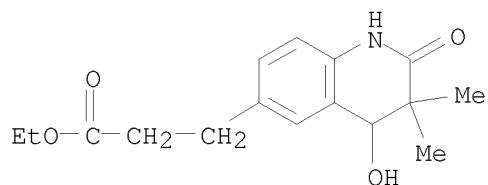
RN 184041-89-2 CAPLUS

CN 6-Quinolineacetic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo-, ethyl ester (CA INDEX NAME)



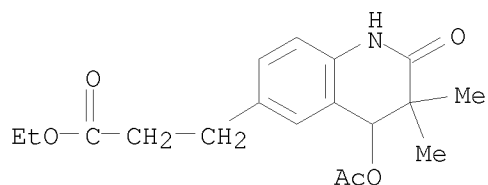
RN 184042-06-6 CAPLUS

CN 6-Quinolinepropanoic acid, 1,2,3,4-tetrahydro-4-hydroxy-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)



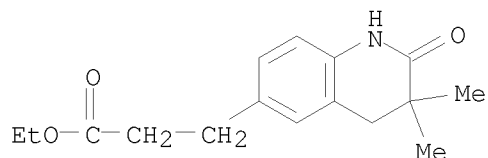
RN 184042-08-8 CAPLUS

CN 6-Quinolinepropanoic acid, 4-(acetyloxy)-1,2,3,4-tetrahydro-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)



RN 184042-09-9 CAPLUS

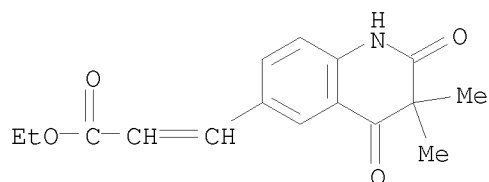
CN 6-Quinolinepropanoic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)



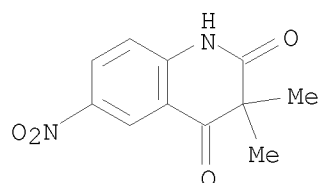
RN 202465-00-7 CAPLUS

CN 2-Propanoic acid, 3-(1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo-6-quinolinyl)-, ethyl ester (CA INDEX NAME)

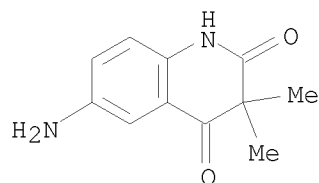




RN 202465-54-1 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 3,3-dimethyl-6-nitro- (CA INDEX NAME)

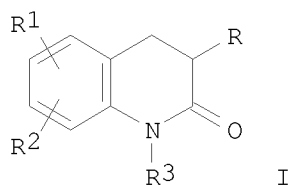


RN 202465-63-2 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 6-amino-3,3-dimethyl- (CA INDEX NAME)



L32 ANSWER 41 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1997:440055 CAPLUS  
 DOCUMENT NUMBER: 127:50546  
 TITLE: Preparation of 3-[(fluorobenzoylpiperidino)alkyl]-2-quinolones as 5-HT antagonists  
 INVENTOR(S): Mccort, Gary; Hoornaert, Christian; Denys, Colombe  
 PATENT ASSIGNEE(S): Synthelabo S. A., Fr.  
 SOURCE: Fr. Demande, 20 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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FR 2739099	A1	19970328	FR 1995-11082	19950921
FR 2739099	B1	19971031		
PRIORITY APPLN. INFO.:			FR 1995-11082	19950921
OTHER SOURCE(S):		CASREACT 127:50546; MARPAT 127:50546		
GI				



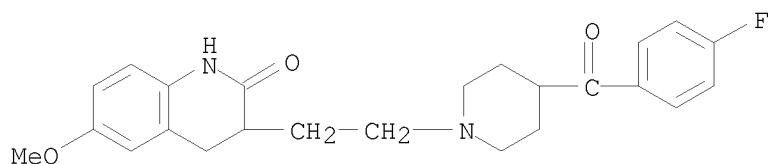
AB Title compds. [I; R = (CH<sub>2</sub>)<sub>m</sub>R<sub>4</sub>; R<sub>1</sub>,R<sub>2</sub> = H, halo, alkyl, alkoxy, etc.; R<sub>3</sub> = H or (un)substituted alkyl; R<sub>4</sub> = 4-(4-fluorobenzoyl)-1-piperidinyl; m = 2-4] were prepared. Thus, 5,2-Cl(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>CHO was condensed with α-Triphenylphosphoranylidene-γ-butyrolactone and the cyclized product converted in 3 step to chloroethylquinolone I (R = CH<sub>2</sub>CH<sub>2</sub>R<sub>4</sub>, R<sub>1</sub> = 6-Cl, R<sub>2</sub> = H, R<sub>3</sub> = Me) (II; R<sub>4</sub> = Cl) which was condensed with 4-(4-fluorobenzoyl)piperidine to give II (R<sub>4</sub> = 4-(4-fluorobenzoyl)-1-piperidinyl). Data for biol. activity of I were given.

IT 191156-14-6P 191156-16-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of 3-[(fluorobenzoylpiperidino)alkyl]-2-quinolones as 5-HT antagonists)

RN 191156-14-6 CAPLUS

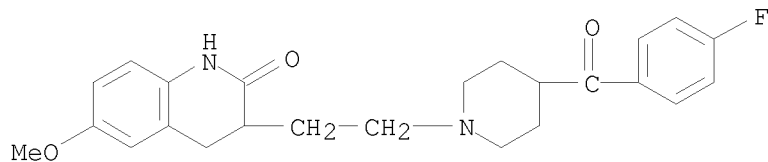
CN 2(1H)-Quinolinone, 3-[2-[4-(4-fluorobenzoyl)-1-piperidinyl]ethyl]-3,4-dihydro-6-methoxy-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 191156-16-8 CAPLUS

CN 2(1H)-Quinolinone, 3-[2-[4-(4-fluorobenzoyl)-1-piperidinyl]ethyl]-3,4-dihydro-6-methoxy- (CA INDEX NAME)



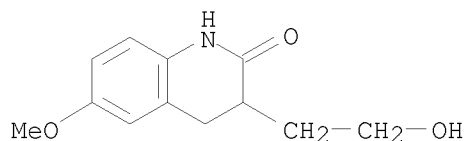
IT 190203-90-8P 190203-91-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of 3-[(fluorobenzoylpiperidino)alkyl]-2-quinolones as 5-HT antagonists)

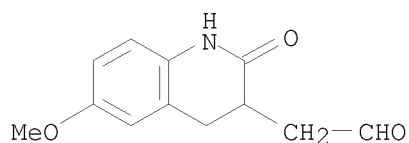
RN 190203-90-8 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-3-(2-hydroxyethyl)-6-methoxy- (CA INDEX NAME)

NAME)



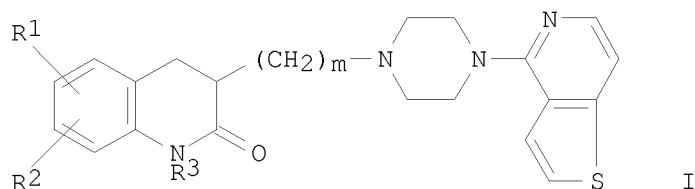
RN 190203-91-9 CAPLUS  
CN 3-Quinolineacetaldehyde, 1,2,3,4-tetrahydro-6-methoxy-2-oxo- (CA INDEX NAME)



L32 ANSWER 42 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1997:385545 CAPLUS  
DOCUMENT NUMBER: 127:5018  
TITLE: Preparation of 3-[ω-(thieno[3,2-c]pyridin-4-yl)piperazin-1-yl]alkyl]-3,4-dihydroquinolin-2(1H)-ones as serotonin antagonists  
INVENTOR(S): McCort, Gary; Hoornaert, Christian; Denys, Colombe  
PATENT ASSIGNEE(S): Synthelabo S. A., Fr.  
SOURCE: Fr. Demande, 22 pp.  
CODEN: FRXXBL  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2738823	A1	19970321	FR 1995-10816	19950915
FR 2738823	B1	19971031		
PRIORITY APPLN. INFO.:			FR 1995-10816	19950915
OTHER SOURCE(S):	MARPAT	127:5018		

GI



AB Seven title compds. I [R1, R2 = H, halo, amino, OH, NO2, cyano, alkyl, alkoxy, CF3, CF3O, COOH, COOR4, CONH2, CONHR4, CONR4R5, NR42, SR4, SO2R4, OSO2CF3, NHSO2R4 (R4, R5 = alkyl); R3 = H, alkyl, (CH2)pOH, (CH2)pNH2, (CH2)nCONH2, etc. (n = 1-4; p = 2-4); m = 2-4] were prepared and their serotonin antagonistic activity determined E.g., 2-nitrobenzaldehyde was

reacted with ( $\gamma$ -butyrolactonylidene)triphenylphosphorane and the product reductively cyclized to give 3-(2-hydroxyethyl)-3,4-dihydroquinolin-2(1H)-one. The last was silylated, N-methylated, chlorinated (thionyl chloride), and reacted with 4-(1-piperazinyl)thieno[3,2-c]pyridine to give I (R1 = R2 = H; R3 = Me; m = 2) as the dihydrochloride salt.

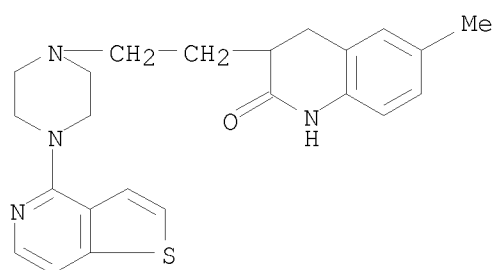
IT 190203-81-7P 190203-82-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of [(thienopyridinyl)piperazinyl]alkyl]dihydroquinolinones as serotonin antagonists)

RN 190203-81-7 CAPLUS

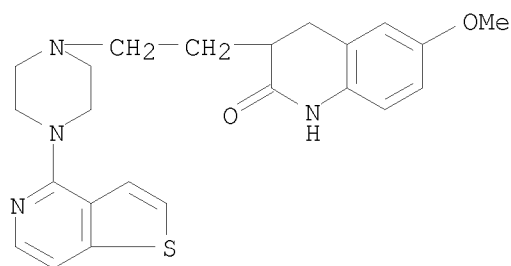
CN 2(1H)-Quinolinone, 3,4-dihydro-6-methyl-3-[2-(4-thieno[3,2-c]pyridin-4-yl-1-piperazinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 190203-82-8 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-6-methoxy-3-[2-(4-thieno[3,2-c]pyridin-4-yl-1-piperazinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

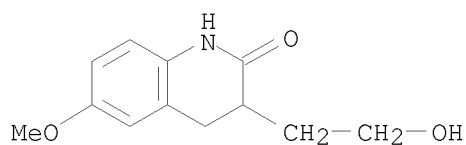
IT 190203-90-8P 190203-91-9P 190203-92-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

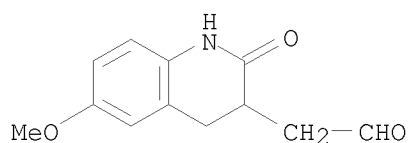
(preparation of [(thienopyridinyl)piperazinyl]alkyl]dihydroquinolinones as serotonin antagonists)

RN 190203-90-8 CAPLUS

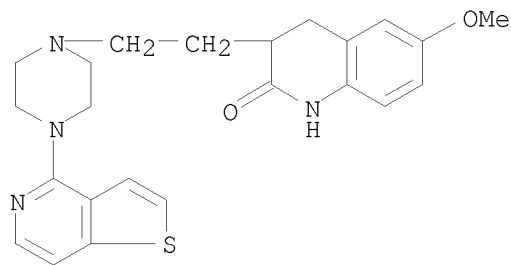
CN 2(1H)-Quinolinone, 3,4-dihydro-3-(2-hydroxyethyl)-6-methoxy- (CA INDEX NAME)



RN 190203-91-9 CAPLUS  
 CN 3-Quinolineacetaldehyde, 1,2,3,4-tetrahydro-6-methoxy-2-oxo- (CA INDEX NAME)



RN 190203-92-0 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-dihydro-6-methoxy-3-[2-(4-thieno[3,2-c]pyridin-4-yl-1-piperazinyl)ethyl]- (CA INDEX NAME)



L32 ANSWER 43 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:262541 CAPLUS

DOCUMENT NUMBER: 126:327309

TITLE: Comparative study of some synthesized and commercial fluorogenic substrates for horseradish peroxidase and its mimetic enzyme hemin by a flow injection method

AUTHOR(S): Li, Yuan-Zong; Townshend, Alan

CORPORATE SOURCE: Sch. Chem., Univ. Hull, Hull, HU6 7RX, UK

SOURCE: Analytica Chimica Acta (1997), 340(1-3), 159-168

CODEN: ACACAM; ISSN: 0003-2670

PUBLISHER: Elsevier

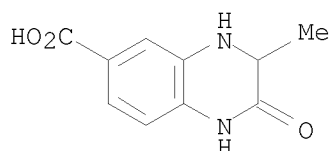
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Four 3,4-dihydroquinoxalin-2(1H)-one derivs., i.e., 3,4-dihydroquinoxalin-2(1H)-one (DHQ), 3-methyl-3,4-dihydroquinoxalin-2(1H)-one (MDHQ), 3,4-dihydroquinoxalin-2(1H)-one-6-acid (DHQ-6-A) and 3-methyl-3,4-dihydroquinoxalin-2(1H)-one-6-acid (MDHQ-6-A), and N,N'-dicyanomethyl-o-phenylenediamine (DCM-OPA) were synthesized as potential substrates for horseradish peroxidase (HRP). Of these compds. DCM-OPA, DHQ, and MDHQ can be prepared by very simple methods in a pure form in large quantities. Their properties for use as fluorogenic substrates for HRP and its mimetic enzyme hemin were compared with com. available substrates, i.e., p-hydroxyphenylacetic acid (p-HPA), p-hydroxyphenylpropionic acid (p-HPPA), homovanillic acid (HVA), and tyramine, by a flow injection

method. The results showed that DCM-OPA and MDHQ were the best among the 5 synthesized substrates and p-HPPA and p-HPA are better than HVA and tyramine. Substrates p-HPPA, p-HPA, DCM-OPA and MDHQ showed comparable ability for H2O2 detection in HRP and hemin catalyzed reaction systems, with detection limits in the nmol per L region. The stability of DCM-OPA is better than MDHQ, but both are stable for at least a month in a refrigerator.

IT 103039-19-6P  
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (comparative study of some synthesized and com. fluorogenic substrates for horseradish peroxidase and its mimetic enzyme hemin by a flow injection method)  
 RN 103039-19-6 CAPLUS  
 CN 6-Quinoxalinecarboxylic acid, 1,2,3,4-tetrahydro-3-methyl-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 44 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:746209 CAPLUS

DOCUMENT NUMBER: 126:19324

TITLE: Preparation of arylsulfonylamino acid amide trypsin and thrombin inhibitors.

INVENTOR(S): Hoyle, William; Howarth, Graham Arton; Brundish, Derek Edward; Kane, Peter Daniel; Walker, Clive Victor; Hayler, Judy; Fullerton, Joseph David; Smith, Garric Paul; Wathey, William Bernard; et al.

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: PCT Int. Appl., 202 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

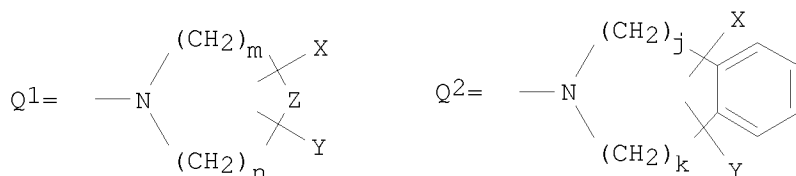
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9629327	A1	19960926	WO 1996-GB520	19960308
W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9648872	A	19961008	AU 1996-48872	19960308
EP 815103	A1	19980107	EP 1996-904963	19960308
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
JP 11502219	T	19990223	JP 1996-528155	19960308
ZA 9602112	A	19960918	ZA 1996-2112	19960315
PRIORITY APPLN. INFO.:			GB 1995-5538	A 19950318

OTHER SOURCE(S):  
GI

MARPAT 126:19324



AB ArSO<sub>2</sub>AQ [Ar = (substituted) aryl, heterocyclyl; A = amino acid residue; Q = Q1, Q2; X = H, alkyl; Y = SO<sub>3</sub>H, PO(OR<sub>14</sub>)<sub>2</sub>, OH, SH, NR<sub>15</sub>R<sub>16</sub>, halo, (substituted) (CqH<sub>2q</sub>)Q<sub>3</sub>, etc.; Q<sub>3</sub> = H, COR<sub>14</sub>, CO<sub>2</sub>R<sub>14</sub>, CONR<sub>15</sub>R<sub>16</sub>, SO<sub>3</sub>H, OR<sub>14</sub>, OCOR<sub>14</sub>, PO(OR<sub>14</sub>)<sub>2</sub>, NR<sub>15</sub>R<sub>16</sub>, SR<sub>14</sub>, halo; R<sub>14</sub>, R<sub>15</sub>, R<sub>16</sub> = H, alkyl, cycloalkyl, aralkyl; R<sub>15</sub>R<sub>16</sub>N = 5-6 membered azacycloalkyl, oxazacycloalkyl; XY = O; Z = bond, O, N optionally substituted by X or Y; m, n = 2-4; m + n = 4-6, j, k = 0-2; j + k = 2-3; when A = Arg, then X, Y ≠ alkyl; when Q = COR<sub>14</sub>, then q = 1-8], were prepared Thus, (S)-arginine and 3-(1-methyl-1-phenylethyl)benzenesulfonyl chloride were stirred with Na<sub>2</sub>CO<sub>3</sub> in H<sub>2</sub>O/dioxane to give 5-guanidino-2(S)-[3-(1-methyl-1-phenylethyl)benzenesulfonylamino]pentanoic acid. The latter was converted to the acid chloride hydrochloride, which was condensed with pyrrolidin-2(R)-ylmethanol in DMF containing Et<sub>3</sub>N to give N-[4-guanidino-1(S)-2(R)-hydroxymethylpyrrolidine-1-carbonylbutyl]-3-(1-methyl-1-phenylethyl)benzenesulfonamide. Tested title compds. inhibited human α-thrombin with K<sub>i</sub> = 0.007-0.094 μM.

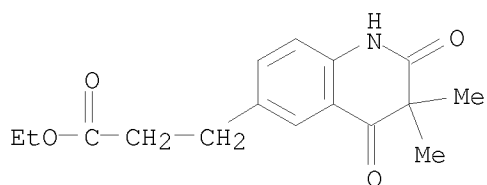
IT 184043-94-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of arylsulfonylamino acid amide trypsin and thrombin inhibitors)

RN 184043-94-5 CAPLUS

CN 6-Quinolinepropanoic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo-, ethyl ester (CA INDEX NAME)



IT 184041-54-1P 184041-58-5P 184041-62-1P

184041-89-2P 184042-06-6P 184042-08-8P

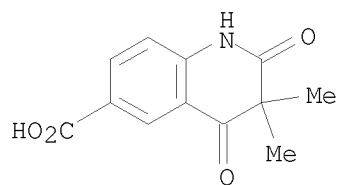
184042-09-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of arylsulfonylamino acid amide trypsin and thrombin inhibitors)

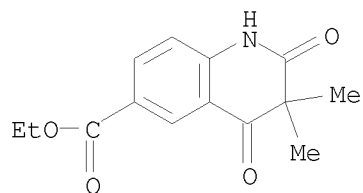
RN 184041-54-1 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo- (CA INDEX NAME)



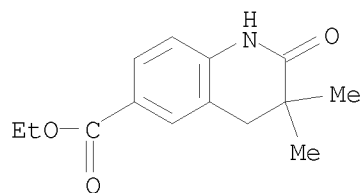
RN 184041-58-5 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo-, ethyl ester (CA INDEX NAME)



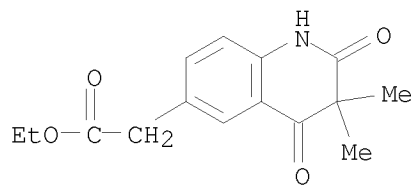
RN 184041-62-1 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)



RN 184041-89-2 CAPLUS

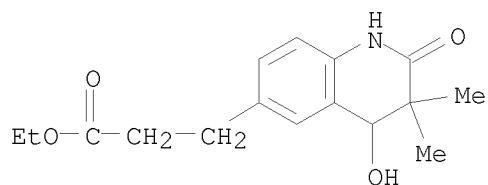
CN 6-Quinolineacetic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2,4-dioxo-, ethyl ester (CA INDEX NAME)



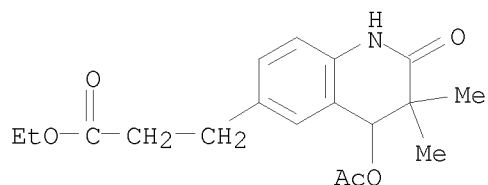
RN 184042-06-6 CAPLUS

CN 6-Quinolinepropanoic acid, 1,2,3,4-tetrahydro-4-hydroxy-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)

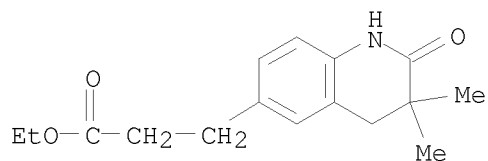




RN 184042-08-8 CAPLUS  
 CN 6-Quinolinepropanoic acid, 4-(acetyloxy)-1,2,3,4-tetrahydro-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)



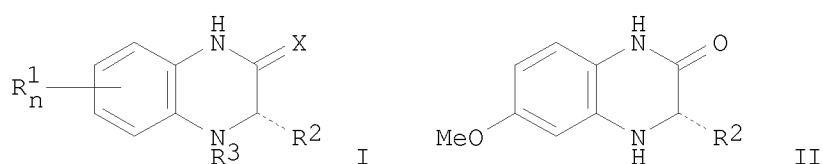
RN 184042-09-9 CAPLUS  
 CN 6-Quinolinepropanoic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-2-oxo-, ethyl ester (CA INDEX NAME)



L32 ANSWER 45 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:379661 CAPLUS  
 DOCUMENT NUMBER: 125:58539  
 TITLE: Preparation of quinoxalinones as antiviral agents  
 INVENTOR(S): Roesner, Manfred; Billhardt-Troughton, Uta-Maria;  
 Kirsch, Reinhard; Kleim, Joerg-Peter; Meichsner,  
 Christoph; Riess, Guenther; Winkler, Irvin  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
 SOURCE: Eur. Pat. Appl., 30 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 708093	A1	19960424	EP 1995-116094	19951012
EP 708093	B1	20010117		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
DE 4437406	A1	19960425	DE 1994-4437406	19941019
AT 198747	T	20010215	AT 1995-116094	19951012
ES 2154311	T3	20010401	ES 1995-116094	19951012
PT 708093	T	20010629	PT 1995-116094	19951012

FI 9504946	A	19960420	FI 1995-4946	19951017
AU 9534316	A	19960502	AU 1995-34316	19951017
AU 708293	B2	19990729		
US 5723461	A	19980303	US 1995-544290	19951017
CA 2160859	A1	19960420	CA 1995-2160859	19951018
NO 9504139	A	19960422	NO 1995-4139	19951018
ZA 9508783	A	19960509	ZA 1995-8783	19951018
HU 73485	A2	19960828	HU 1995-3005	19951018
CN 1135483	A	19961113	CN 1995-120372	19951018
CN 1094930	B	20021127		
HR 950524	B1	20020630	HR 1995-524	19951018
PL 184860	B1	20030131	PL 1995-311016	19951018
JP 08225544	A	19960903	JP 1995-271019	19951019
BR 9504456	A	19970520	BR 1995-4456	19951019
HK 1011988	A1	20010928	HK 1998-113241	19981212
GR 3035673	T3	20010629	GR 2001-400523	20010330
PRIORITY APPLN. INFO.:			DE 1994-4437406	A 19941019
OTHER SOURCE(S):	MARPAT	125:58539		
GI				



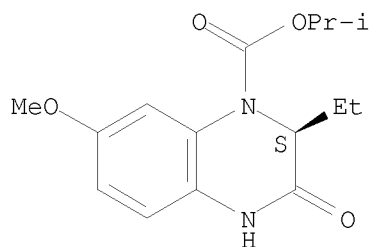
AB Title compds. [tautomeric I; R1 = F, Cl, OH, alkoxy; R2 = (hydroxy)alkyl, alkoxy, alkylthio; R3 = alkoxy-carbonyl, alkenyloxycarbonyl; X = O, S, Se; n = 0-2] were prepared Thus, L-cysteine was N-arylated with 2,4-F2C6H3NO2 and the etherified product reductively cyclized to give, after N-acylation, title compound II (R2 = SMe). II (R2 = Et) had MIC of <1ng/mL against HIV activity in T-cell culture.

IT 178040-97-6P 178040-98-7P 178041-00-4P  
178041-01-5P 178041-02-6P 178041-03-7P  
178041-10-6P 178041-12-8P 178041-16-2P  
178041-17-3P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of quinoxalinones as antiviral agents)

RN 178040-97-6 CAPLUS

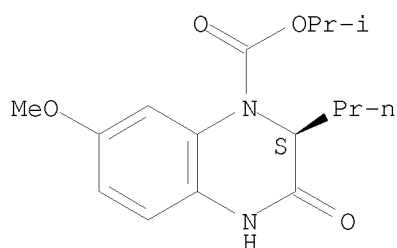
CN 1(2H)-Quinoxalinecarboxylic acid, 2-ethyl-3,4-dihydro-7-methoxy-3-oxo-, 1-methylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

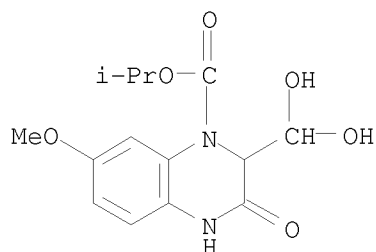


RN 178040-98-7 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-3-oxo-2-propyl-,  
 1-methylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

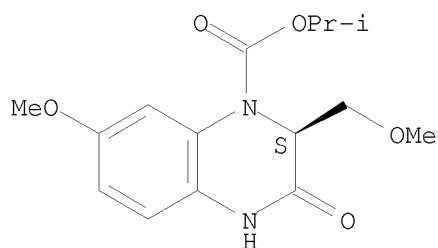


RN 178041-00-4 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 2-(dihydroxymethyl)-3,4-dihydro-7-  
 methoxy-3-oxo-, 1-methylethyl ester (CA INDEX NAME)



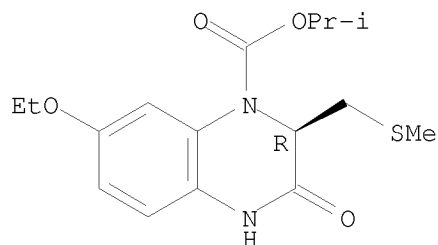
RN 178041-01-5 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-(methoxymethyl)-  
 3-oxo-, 1-methylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



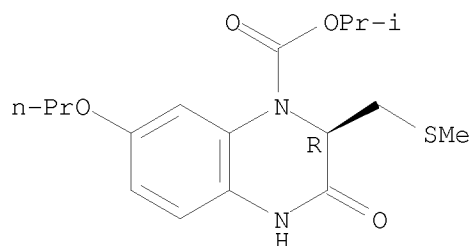
RN 178041-02-6 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 7-ethoxy-3,4-dihydro-2-  
 [(methylthio)methyl]-3-oxo-, 1-methylethyl ester, (R)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.



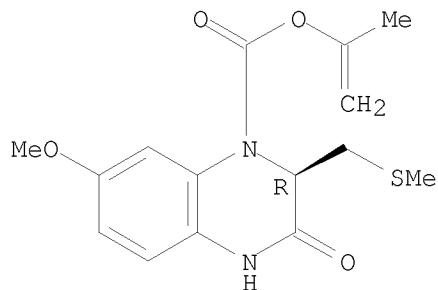
RN 178041-03-7 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-2-[(methylthio)methyl]-3-oxo-  
 7-propoxy-, 1-methylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



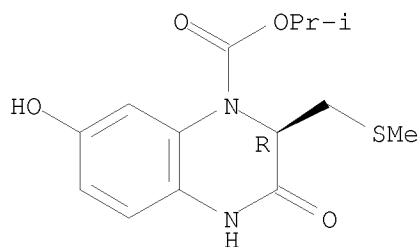
RN 178041-10-6 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-  
 [(methylthio)methyl]-3-oxo-, 1-methylethenyl ester, (2R)- (CA INDEX NAME)

Absolute stereochemistry.

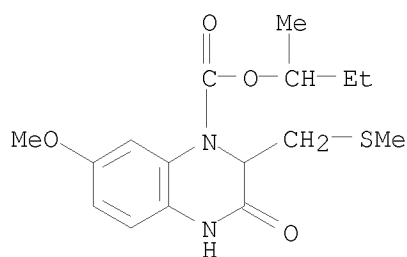


RN 178041-12-8 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-hydroxy-2-  
 [(methylthio)methyl]-3-oxo-, 1-methylethyl ester, (R)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.

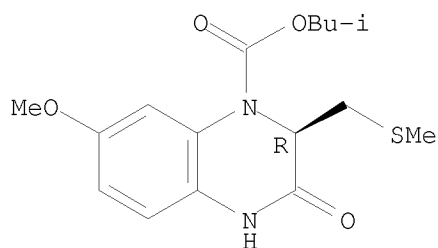


RN 178041-16-2 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-  
 [(methylthio)methyl]-3-oxo-, 1-methylpropyl ester (CA INDEX NAME)



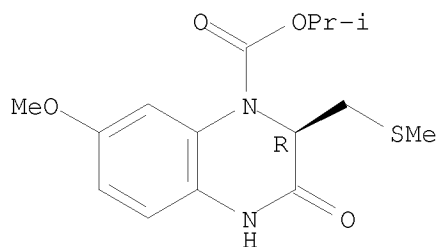
RN 178041-17-3 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-  
 [(methylthio)methyl]-3-oxo-, 2-methylpropyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 178040-87-4P 178040-99-8P 178041-13-9P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of quinoxalinones as antiviral agents)  
 RN 178040-87-4 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-  
 [(methylthio)methyl]-3-oxo-, 1-methylethyl ester, (2R)- (CA INDEX NAME)

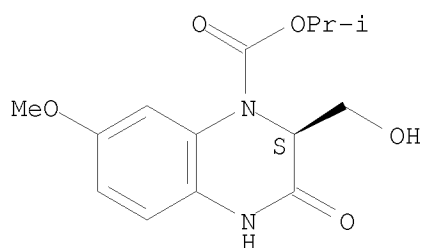
Absolute stereochemistry.



RN 178040-99-8 CAPLUS

CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-2-(hydroxymethyl)-7-methoxy-3-oxo-, 1-methylethyl ester, (S)- (9CI) (CA INDEX NAME)

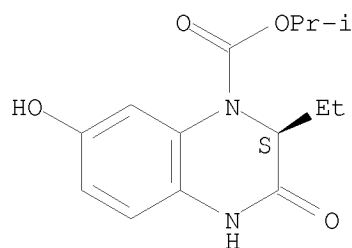
Absolute stereochemistry.



RN 178041-13-9 CAPLUS

CN 1(2H)-Quinoxalinecarboxylic acid, 2-ethyl-3,4-dihydro-7-hydroxy-3-oxo-, 1-methylethyl ester, (2S)- (CA INDEX NAME)

Absolute stereochemistry.



IT 178041-55-9P 178041-56-0P 178041-57-1P

178041-70-8P 178041-71-9P 178041-72-0P

178041-73-1P 178041-74-2P 178041-75-3P

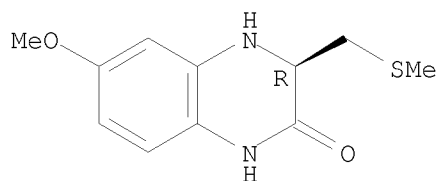
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of quinoxalinones as antiviral agents)

RN 178041-55-9 CAPLUS

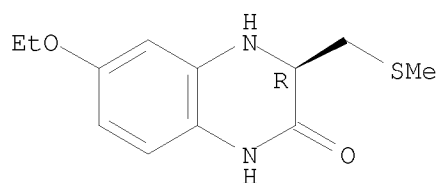
CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3-[(methylthio)methyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



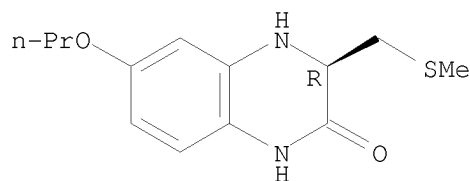
RN 178041-56-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-ethoxy-3,4-dihydro-3-[(methylthio)methyl]-, (R)-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



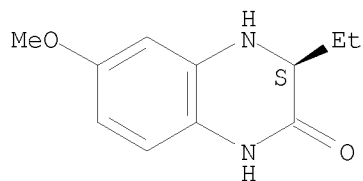
RN 178041-57-1 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-3-[(methylthio)methyl]-6-propoxy-, (R)-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



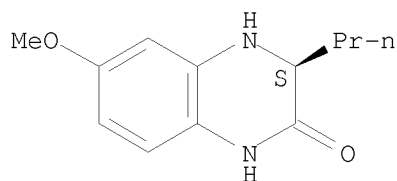
RN 178041-70-8 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-ethyl-3,4-dihydro-6-methoxy-, (S)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.



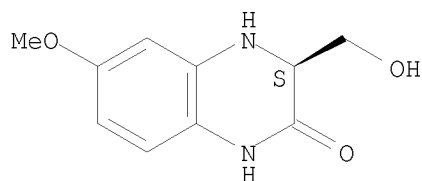
RN 178041-71-9 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3-propyl-, (S)- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.

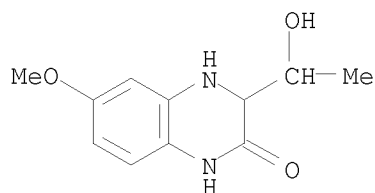


RN 178041-72-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-3-(hydroxymethyl)-6-methoxy-, (S)- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

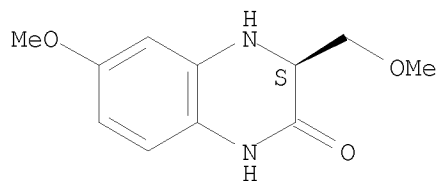


RN 178041-73-1 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-3-(1-hydroxyethyl)-6-methoxy- (CA INDEX  
 NAME)



RN 178041-74-2 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3-(methoxymethyl)-, (S)- (9CI)  
 (CA INDEX NAME)

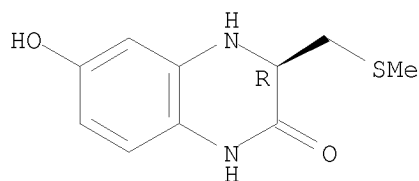
Absolute stereochemistry.



RN 178041-75-3 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3-[(methylthio)methyl]-, (R)-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.





L32 ANSWER 46 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:294891 CAPLUS

DOCUMENT NUMBER: 124:343136

TITLE: Preparation of 4-alkylidene-2-quinolinones as antiviral agents

INVENTOR(S): Kirsch, Reinhard; Kleim, Joerg-Peter; Riess, Guenther; Roesner, Manfred; Winkler, Irvin

PATENT ASSIGNEE(S): Hoechst A.-G., Germany

SOURCE: Eur. Pat. Appl., 70 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

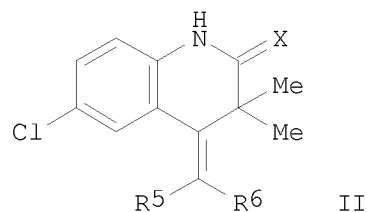
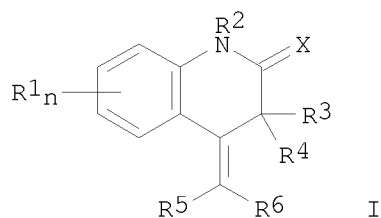
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 697405	A1	19960221	EP 1995-112585	19950810
EP 697405	B1	20020814		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
DE 4428932	A1	19960222	DE 1994-4428932	19940816
AT 222239	T	20020815	AT 1995-112585	19950810
PT 697405	T	20021231	PT 1995-112585	19950810
ES 2179857	T3	20030201	ES 1995-112585	19950810
FI 9503841	A	19960217	FI 1995-3841	19950814
AU 9528531	A	19960229	AU 1995-28531	19950814
AU 710238	B2	19990916		
US 5798365	A	19980825	US 1995-515556	19950814
CA 2156128	A1	19960217	CA 1995-2156128	19950815
NO 9503204	A	19960219	NO 1995-3204	19950815
JP 08059621	A	19960305	JP 1995-228639	19950815
JP 3860618	B2	20061220		
ZA 9506798	A	19960319	ZA 1995-6798	19950815
CN 1123275	A	19960529	CN 1995-115281	19950815
HU 73133	A2	19960628	HU 1995-2403	19950815
TW 407151	B	20001001	TW 1995-84108914	19950828
PRIORITY APPLN. INFO.:			DE 1994-4428932	A 19940816
OTHER SOURCE(S):		MARPAT 124:343136		

GI



AB Title compds. [I; R1 = halo, OH, alkyl, alkoxy, etc.; R2 = H, (un)substituted alk(en)yl, alkanoyl, etc.; R3,R4 = H, (un)substituted alk(en)yl, etc.; R3R4 = atoms to form a carbocyclic ring, (un)substituted methylene; R5,R6 = H, CO2H, alkyl, etc.; X = O, S, NR2, etc.; n = 0-4] were prepared Thus, 5-chloroisatoic anhydride was cyclocondensed with Me2CHCO2Et to give 6-chloro-3,3-dimethyl-1,3-dihydroquinoline-2,4-dione which was condensed with BuMgBr and the product dehydrated to give a mixture of title compound II (1 of R5,R6 = Pr and the other = H, X = O). Similarly prepared II (1 of R5,R6 = Et and the other = H, X = S) had MIC of 0.0016 µg/mL against HIV proliferation in cell culture and IC50 of 8nM against HIV reverse transcriptase in vitro.

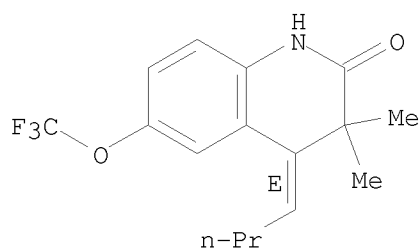
IT 176497-00-0P 176497-06-6P 176497-08-8P  
 176497-09-9P 176497-11-3P 176497-19-1P  
 176497-21-5P 176497-23-7P 176497-27-1P  
 176497-30-6P 176497-31-7P 176497-44-2P  
 176497-83-9P 176497-93-1P 176497-96-4P  
 176497-97-5P 176498-90-1P 176498-92-3P  
 176498-94-5P 176499-02-8P 176499-04-0P  
 176499-06-2P 176499-09-5P 176499-12-0P  
 176499-25-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 4-alkylidene-2-quinolinones as antiviral agents)

RN 176497-00-0 CAPLUS

CN 2(1H)-Quinolinone, 4-butylidene-3,4-dihydro-3,3-dimethyl-6-(trifluoromethoxy)-, (E)- (9CI) (CA INDEX NAME)

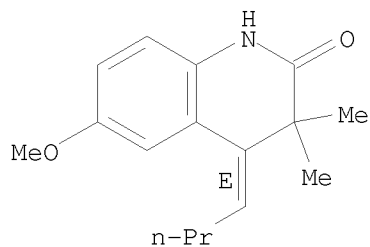
Double bond geometry as shown.



RN 176497-06-6 CAPLUS

CN 2(1H)-Quinolinone, 4-butylidene-3,4-dihydro-6-methoxy-3,3-dimethyl-, (E)- (9CI) (CA INDEX NAME)

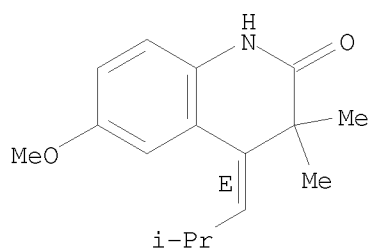
Double bond geometry as shown.



RN 176497-08-8 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-6-methoxy-3,3-dimethyl-4-(2-methylpropylidene)-, (E)- (9CI) (CA INDEX NAME)

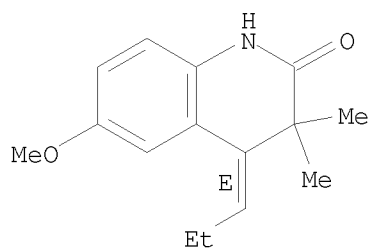
Double bond geometry as shown.



RN 176497-09-9 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-6-methoxy-3,3-dimethyl-4-propylidene-, (E)-  
(9CI) (CA INDEX NAME)

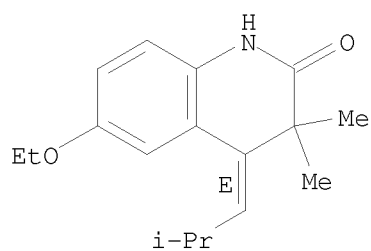
Double bond geometry as shown.



RN 176497-11-3 CAPLUS

CN 2(1H)-Quinolinone, 6-ethoxy-3,4-dihydro-3,3-dimethyl-4-(2-methylpropylidene)-, (E)- (9CI) (CA INDEX NAME)

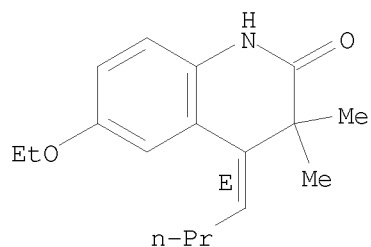
Double bond geometry as shown.



RN 176497-19-1 CAPLUS

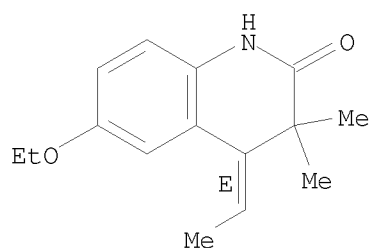
CN 2(1H)-Quinolinone, 4-butylidene-6-ethoxy-3,4-dihydro-3,3-dimethyl-, (E)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.



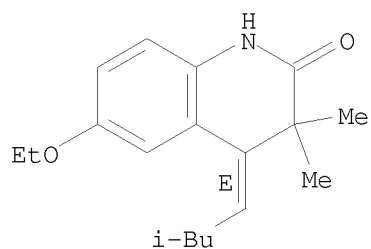
RN 176497-21-5 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-4-ethylidene-3,4-dihydro-3,3-dimethyl-, (E)-  
 (9CI) (CA INDEX NAME)

Double bond geometry as shown.



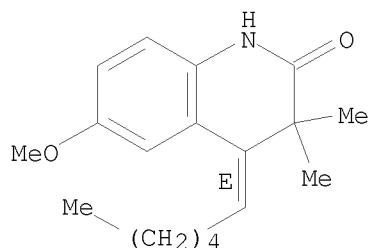
RN 176497-23-7 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-3,4-dihydro-3,3-dimethyl-4-(3-methylbutylidene)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



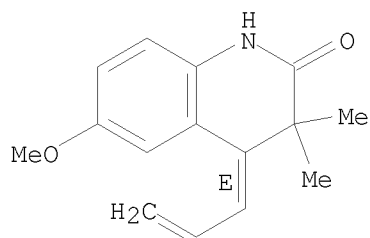
RN 176497-27-1 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hexylidene-3,4-dihydro-6-methoxy-3,3-dimethyl-, (E)-  
 (9CI) (CA INDEX NAME)

Double bond geometry as shown.



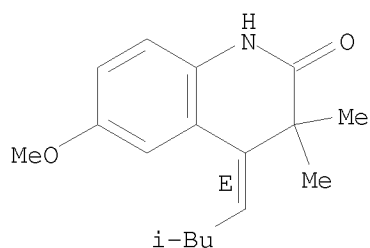
RN 176497-30-6 CAPLUS  
CN 2(1H)-Quinolinone, 3,4-dihydro-6-methoxy-3,3-dimethyl-4-(2-propenylidene)-  
, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



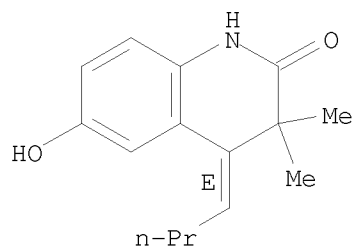
RN 176497-31-7 CAPLUS  
CN 2(1H)-Quinolinone, 3,4-dihydro-6-methoxy-3,3-dimethyl-4-(3-methylbutylidene)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

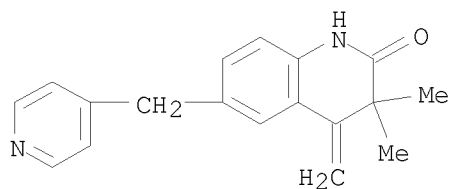


RN 176497-44-2 CAPLUS  
CN 2(1H)-Quinolinone, 4-butylidene-3,4-dihydro-6-hydroxy-3,3-dimethyl-, (E)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.

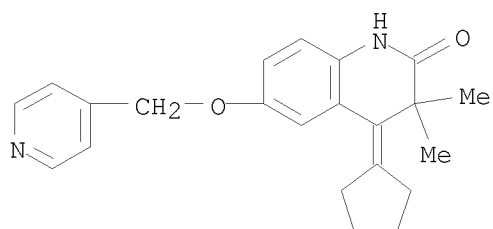


RN 176497-83-9 CAPLUS  
CN 2(1H)-Quinolinone, 3,4-dihydro-3,3-dimethyl-4-methylene-6-(4-pyridinylmethyl)- (CA INDEX NAME)



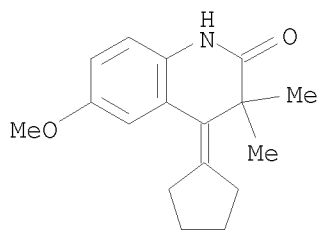
RN 176497-93-1 CAPLUS

CN 2(1H)-Quinolinone, 4-cyclopentylidene-3,4-dihydro-3,3-dimethyl-6-(4-pyridinylmethoxy)- (CA INDEX NAME)



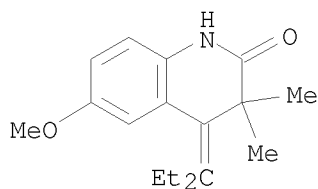
RN 176497-96-4 CAPLUS

CN 2(1H)-Quinolinone, 4-cyclopentylidene-3,4-dihydro-6-methoxy-3,3-dimethyl- (CA INDEX NAME)



RN 176497-97-5 CAPLUS

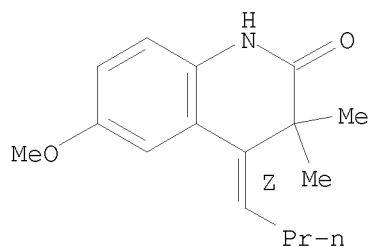
CN 2(1H)-Quinolinone, 4-(1-ethylpropylidene)-3,4-dihydro-6-methoxy-3,3-dimethyl- (CA INDEX NAME)



RN 176498-90-1 CAPLUS

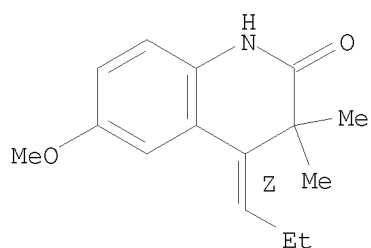
CN 2(1H)-Quinolinone, 4-butylidene-3,4-dihydro-6-methoxy-3,3-dimethyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



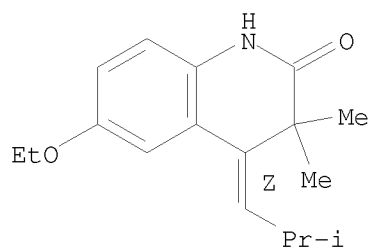
RN 176498-92-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-dihydro-6-methoxy-3,3-dimethyl-4-propylidene-, (Z)-  
 (9CI) (CA INDEX NAME)

Double bond geometry as shown.



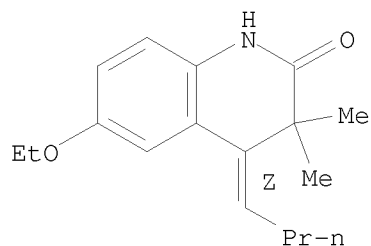
RN 176498-94-5 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-3,4-dihydro-3,3-dimethyl-4-(2-methylpropylidene)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



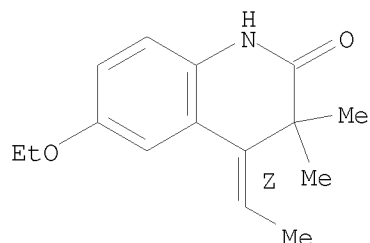
RN 176499-02-8 CAPLUS  
 CN 2(1H)-Quinolinone, 4-butylidene-6-ethoxy-3,4-dihydro-3,3-dimethyl-, (Z)-  
 (9CI) (CA INDEX NAME)

Double bond geometry as shown.



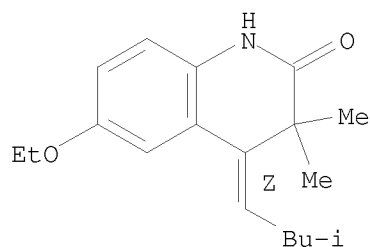
RN 176499-04-0 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-4-ethylidene-3,4-dihydro-3,3-dimethyl-, (Z)-  
 (9CI) (CA INDEX NAME)

Double bond geometry as shown.



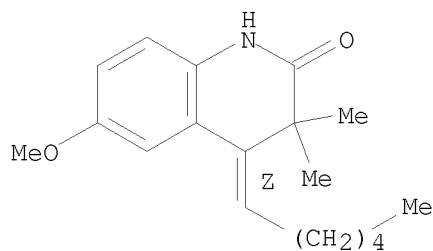
RN 176499-06-2 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-3,4-dihydro-3,3-dimethyl-4-(3-methylbutylidene)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 176499-09-5 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hexylidene-3,4-dihydro-6-methoxy-3,3-dimethyl-, (Z)-  
 (9CI) (CA INDEX NAME)

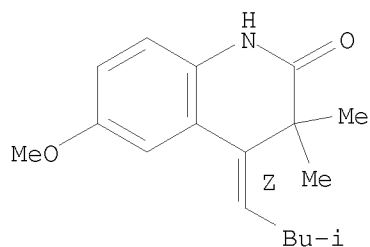
Double bond geometry as shown.



RN 176499-12-0 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-dihydro-6-methoxy-3,3-dimethyl-4-(3-methylbutylidene)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

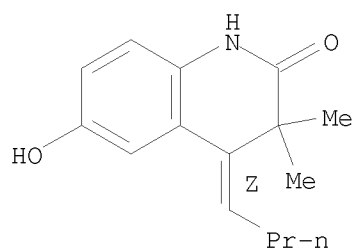




RN 176499-25-5 CAPLUS

CN 2(1H)-Quinolinone, 4-butylidene-3,4-dihydro-6-hydroxy-3,3-dimethyl-, (Z)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.



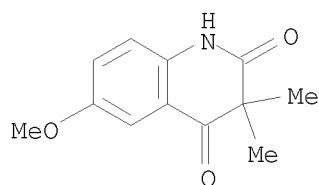
IT 158602-14-3P 176498-21-8P 176498-22-9P  
176498-24-1P 176498-25-2P 176498-26-3P  
176498-27-4P 176498-31-0P 176498-32-1P  
176498-33-2P 176498-35-4P 176498-41-2P  
176498-52-5P 176498-58-1P 176498-60-5P  
176498-61-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation of 4-alkylidene-2-quinolinones as antiviral agents)

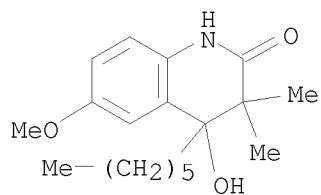
RN 158602-14-3 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl- (CA INDEX NAME)



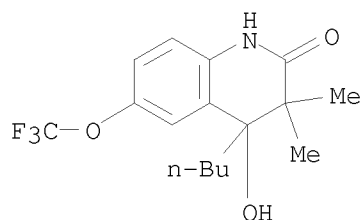
RN 176498-21-8 CAPLUS

CN 2(1H)-Quinolinone, 4-hexyl-3,4-dihydro-4-hydroxy-6-methoxy-3,3-dimethyl-  
(CA INDEX NAME)



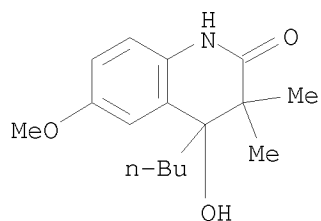
RN 176498-22-9 CAPLUS

CN 2(1H)-Quinolinone, 4-butyl-3,4-dihydro-4-hydroxy-3,3-dimethyl-6-(trifluoromethoxy)- (CA INDEX NAME)



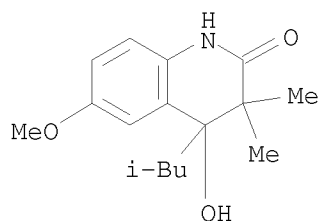
RN 176498-24-1 CAPLUS

CN 2(1H)-Quinolinone, 4-butyl-3,4-dihydro-4-hydroxy-6-methoxy-3,3-dimethyl- (CA INDEX NAME)



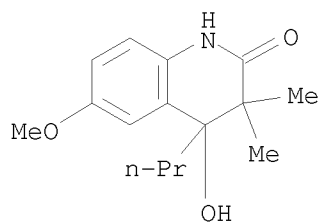
RN 176498-25-2 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-4-hydroxy-6-methoxy-3,3-dimethyl-4-(2-methylpropyl)- (CA INDEX NAME)



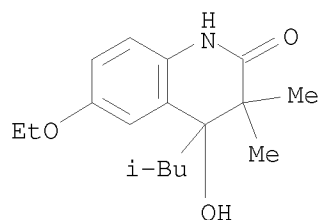
RN 176498-26-3 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-4-hydroxy-6-methoxy-3,3-dimethyl-4-propyl- (CA INDEX NAME)



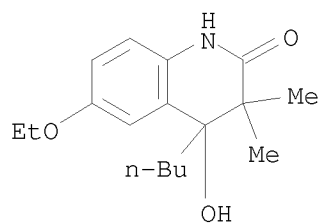
RN 176498-27-4 CAPLUS

CN 2(1H)-Quinolinone, 6-ethoxy-3,4-dihydro-4-hydroxy-3,3-dimethyl-4-(2-methylpropyl)- (CA INDEX NAME)



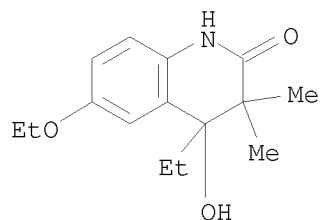
RN 176498-31-0 CAPLUS

CN 2(1H)-Quinolinone, 4-butyl-6-ethoxy-3,4-dihydro-4-hydroxy-3,3-dimethyl- (CA INDEX NAME)



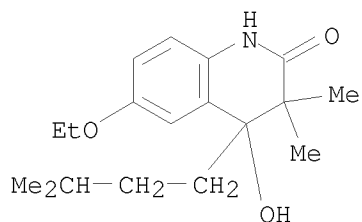
RN 176498-32-1 CAPLUS

CN 2(1H)-Quinolinone, 6-ethoxy-4-ethyl-3,4-dihydro-4-hydroxy-3,3-dimethyl- (CA INDEX NAME)



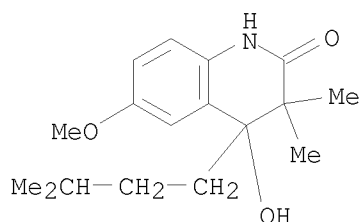
RN 176498-33-2 CAPLUS

CN 2(1H)-Quinolinone, 6-ethoxy-3,4-dihydro-4-hydroxy-3,3-dimethyl-4-(3-methylbutyl)- (CA INDEX NAME)



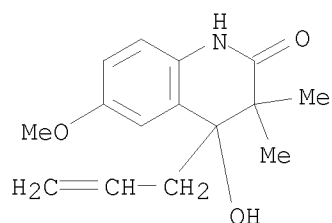
RN 176498-35-4 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-4-hydroxy-6-methoxy-3,3-dimethyl-4-(3-methylbutyl)- (CA INDEX NAME)



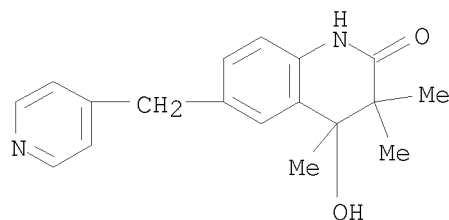
RN 176498-41-2 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-4-hydroxy-6-methoxy-3,3-dimethyl-4-(2-propenyl)- (9CI) (CA INDEX NAME)



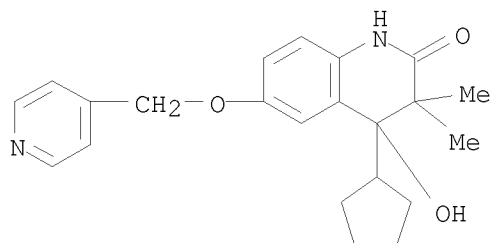
RN 176498-52-5 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-4-hydroxy-3,3,4-trimethyl-6-(4-pyridinylmethyl)- (CA INDEX NAME)

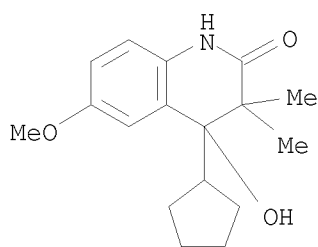


RN 176498-58-1 CAPLUS

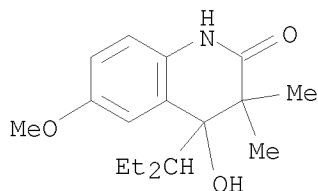
CN 2(1H)-Quinolinone, 4-cyclopentyl-3,4-dihydro-4-hydroxy-3,3-dimethyl-6-(4-pyridinylmethoxy)- (CA INDEX NAME)



RN 176498-60-5 CAPLUS  
 CN 2(1H)-Quinolinone, 4-cyclopentyl-3,4-dihydro-4-hydroxy-6-methoxy-3,3-dimethyl- (CA INDEX NAME)



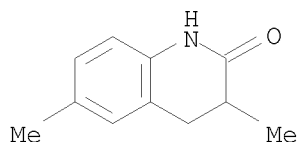
RN 176498-61-6 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(1-ethylpropyl)-3,4-dihydro-4-hydroxy-6-methoxy-3,3-dimethyl- (CA INDEX NAME)



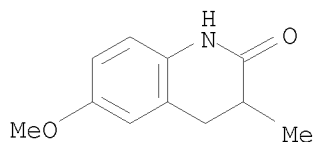
L32 ANSWER 47 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:239868 CAPLUS  
 DOCUMENT NUMBER: 124:260811  
 TITLE: Regioselective Palladium(II)-Catalyzed Synthesis of Five- or Seven-Membered Ring Lactones and Five-, Six- or Seven-Membered Ring Lactams by Cyclocarbonylation Methodology  
 AUTHOR(S): El Ali, Bassam; Okuro, Kazumi; Vasapollo, Giuseppe; Alper, Howard  
 CORPORATE SOURCE: Department of Chemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.  
 SOURCE: Journal of the American Chemical Society (1996), 118(18), 4264-70  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The reaction of 2-allylphenols with carbon monoxide and hydrogen in the presence of catalytic quantities of a cationic palladium(II) complex

[(PCy<sub>3</sub>)<sub>2</sub>Pd(H)(H<sub>2</sub>O)]+BF<sub>4</sub><sup>-</sup> or palladium acetate and 1,4-bis(diphenylphosphino)butane, gave five- or seven-membered ring lactones (bicyclic, tricyclic, and pentacyclic) as the principal products, often in excellent yields. Use of 2-aminostyrenes as reactants and catalytic quantities of palladium acetate and tricyclohexylphosphine, gave five-membered ring lactams in high yield and selectivity. Bicyclic and tricyclic heterocycles containing six-membered ring lactams were synthesized from the reaction of 2-allylanilines with CO/H<sub>2</sub> using the catalytic system Pd(OAc)<sub>2</sub>/PPh<sub>3</sub>, while use of 1,4-bis(diphenylphosphino)butane instead of PPh<sub>3</sub> in the latter process results in the formation of the seven-membered lactams benzazepinones in good yield. The regiochem. control depends on the nature of the palladium catalyst, the relative pressures of the gases, and the solvent. For example, the cyclocarbonylation of 2-allylphenol gave 4,5-dihydro-1-benzoxepin-2(3H)-one (59% yield) and 3-ethyl-2(3H)-benzofuranone (13% yield) and 3,4-dihydro-2H-1-benzopyran-2-one (28% yield).

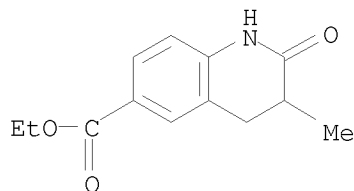
IT 175092-99-6P 175093-01-3P 175093-04-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (regioselective palladium-catalyzed cyclocarbonylation of allylphenols and allylbenzenamines)  
 RN 175092-99-6 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-dihydro-3,6-dimethyl- (CA INDEX NAME)



RN 175093-01-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-dihydro-6-methoxy-3-methyl- (CA INDEX NAME)



RN 175093-04-6 CAPLUS  
 CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-3-methyl-2-oxo-, ethyl ester (CA INDEX NAME)

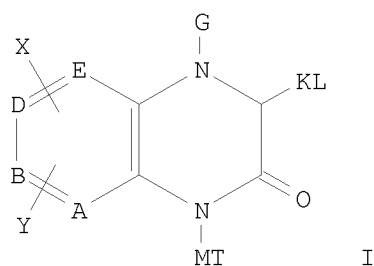


L32 ANSWER 48 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:874692 CAPLUS  
 DOCUMENT NUMBER: 123:286087  
 TITLE: Preparation of annelated 2-oxopiperazine endothelin antagonists

INVENTOR(S): Unger, Liliane; Raschack, Manfred; Wernet, Wolfgang;  
Boehm, Hans-Joachim; Riechers, Hartmut  
PATENT ASSIGNEE(S): BASF A.-G., Germany  
SOURCE: Ger. Offen., 9 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

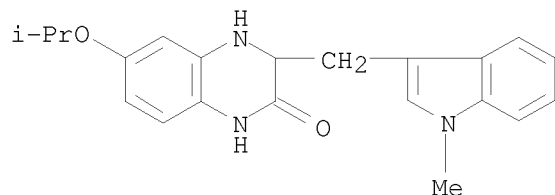
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4341663	A1	19950608	DE 1993-4341663	19931207
PRIORITY APPLN. INFO.:			DE 1993-4341663	19931207
OTHER SOURCE(S):	MARPAT	123:286087		

GI



AB The title compds. [I; 2 of atoms A, B, D, E = CH and the remaining 2 are CH or N; G = COR<sub>1</sub>, SO<sub>2</sub>R<sub>1</sub>, alkyl, (un)substituted Ph, etc.; R<sub>1</sub> = H, alkyl; K, M = direct bond, (un)substituted alkylene; L, T = CO<sub>2</sub>R<sub>3</sub>, CON(R<sub>3</sub>)R<sub>4</sub>, SO<sub>3</sub>R<sub>3</sub>; R<sub>3</sub>, R<sub>4</sub> = H, alkyl; X, Y = H, alkyl, alkylthio, alkoxy, (un)substituted PhCH<sub>2</sub>, PhO], useful as endothelin receptor antagonists (no data), are prepared Thus, Et [1-benzyl-4-(1H-indol-3-ylmethyl)-3-oxo-1,2,3,4-tetraquinoxalin-2-yl]acetate, m.p. 122°, was prepared in 5 steps from 2-FC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>.

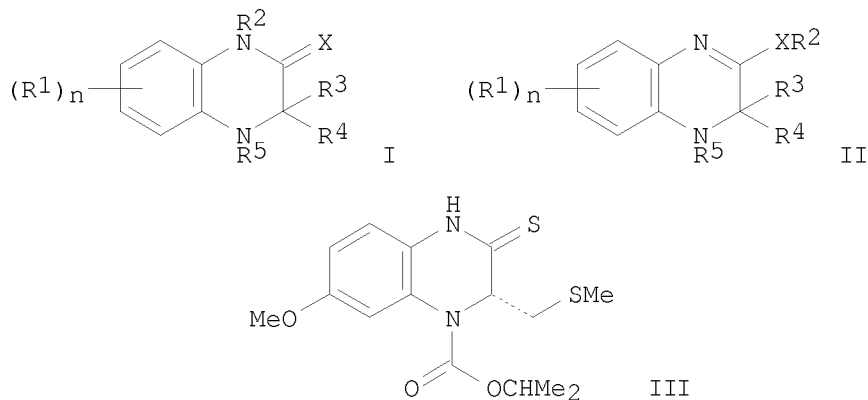
IT 169282-90-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of annelated 2-oxopiperazine endothelin antagonists from)  
RN 169282-90-0 CAPLUS  
CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-(1-methylethoxy)-3-[(1-methyl-1H-indol-3-yl)methyl]- (CA INDEX NAME)



L32 ANSWER 49 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1995:812971 CAPLUS  
DOCUMENT NUMBER: 123:228218  
TITLE: Combination of quinoxalines and nucleosides for treating viral infection and preparation of the

quinoxalines.  
 INVENTOR(S): Meichsner, Christoph; Riess, Guenther; Kleim, Joerg  
 Peter; Roesner, Manfred; Paessens, Arno; Blunck,  
 Martin  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany; Aventis Pharma Deutschland  
 GmbH  
 SOURCE: Eur. Pat. Appl., 69 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 657166	A1	19950614	EP 1994-119146	19941205
EP 657166	B1	20030409		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
DE 4342024	A1	19950614	DE 1993-4342024	19931209
AT 236642	T	20030415	AT 1994-119146	19941205
CN 1108935	A	19950927	CN 1994-119877	19941207
CA 2137605	A1	19950610	CA 1994-2137605	19941208
AU 9480421	A	19950615	AU 1994-80421	19941208
AU 697486	B2	19981008		
ZA 9409785	A	19950712	ZA 1994-9785	19941208
JP 07196511	A	19950801	JP 1994-330455	19941208
HU 70037	A2	19950928	HU 1994-3518	19941208
HU 221498	B	20021028		
PRIORITY APPLN. INFO.:			DE 1993-4342024	A 19931209
OTHER SOURCE(S):			CASREACT 123:228218; MARPAT 123:228218	
GI				



AB Combinations of  $\geq 1$  nucleoside and  $\geq 1$  quinoxaline [I, II;  $n = 0-4$ ;  $R_1 = F, Cl, Br, \text{iodo}, CF_3, OCF_3, OH, \text{alkyl}, \text{cycloalkyl}, \text{alkoxy}, \text{alkylthio}, \text{alkylsulfinyl}, \text{alkylsulfonyl}, \text{piperidino}, \text{amino}, NO_2, N_3, \text{thiomorpholino}, \text{cyano}, \text{acyloxy}, \text{acylamino}, \text{carbamoyl}, CO_2H, (\text{substituted}) Ph, PhO, PhO_2C, PhS, \text{pyridyl}, \text{etc.}$ ;  $R_2, R_5 = H, OH, \text{alkoxy}, \text{aryloxy}, \text{acyloxy}, \text{cyano}, \text{amino}, \text{alkylamino}, \text{dialkylamino}, \text{arylamino}, \text{acylamino}, (\text{substituted}) \text{alkyl}, \text{alkenyl}, \text{allenyl}, \text{alkynyl}, \text{etc.}$ ;  $R_3, R_4 = H, (\text{substituted}) \text{alkyl}, \text{alkenyl}, \text{cycloalkyl}, \text{cycloalkenyl}, \text{aryl}, \text{aralkyl}, \text{heteroaryl}, \text{heteroarylalkyl}$ ;  $R_3R_4, R_3R_5 = \text{atoms to form a (substituted) (unsatd.) (heterocyclic) ring}$ ;  $X = O, S, Se, NR_2$ ], are claimed. Thus,



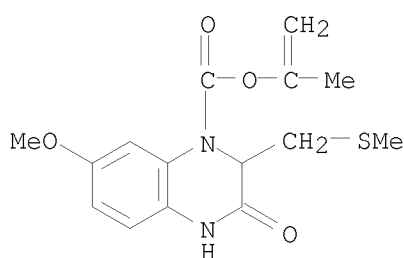
2,4-dichloronitrobenzene was refluxed with alanine in 2-methoxyethanol/aqueous NaOH to give 55% (S)-N-(3-chloro-6-nitrophenyl)alanine. The latter was hydrogenated in MeOH over Raney Ni to give (3S)-6-chloro-3-methyl-3,4-dihydroquinoxalin-2(1H)-one. Title compound (III) at 1-12 nM synergized the anti-HIV activity of AZT.

IT 146739-16-4P 146739-17-5P 146739-29-9P  
146739-30-2P 146739-34-6P 146739-40-4P  
146739-72-2P 168173-71-5P 168173-78-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(combination of quinoxalines and nucleosides for treating viral infection and preparation of the quinoxalines)

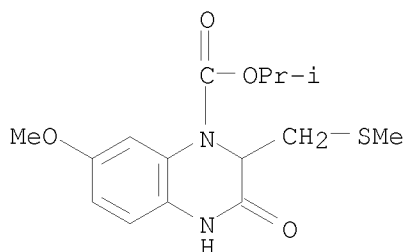
RN 146739-16-4 CAPLUS

CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-  
[(methylthio)methyl]-3-oxo-, 1-methylethenyl ester (CA INDEX NAME)



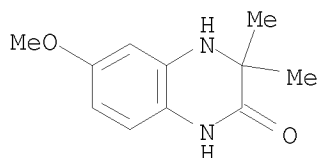
RN 146739-17-5 CAPLUS

CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-  
[(methylthio)methyl]-3-oxo-, 1-methylethyl ester (CA INDEX NAME)



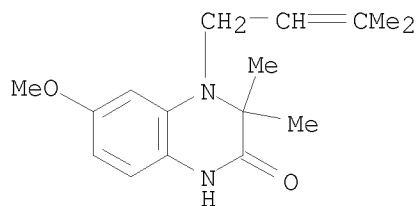
RN 146739-29-9 CAPLUS

CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3,3-dimethyl- (CA INDEX NAME)



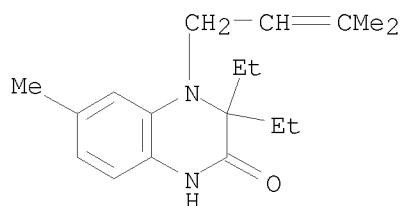
RN 146739-30-2 CAPLUS

CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3,3-dimethyl-4-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



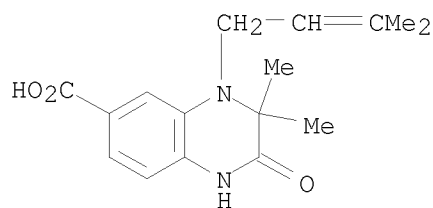
RN 146739-34-6 CAPLUS

CN 2(1H)-Quinoxalinone, 3,3-diethyl-3,4-dihydro-6-methyl-4-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



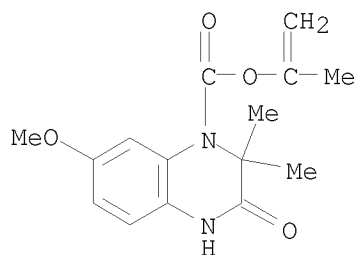
RN 146739-40-4 CAPLUS

CN 6-Quinoxalinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-4-(3-methyl-2-butenyl)-2-oxo- (9CI) (CA INDEX NAME)



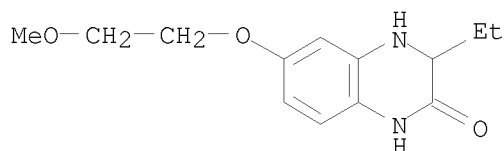
RN 146739-72-2 CAPLUS

CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2,2-dimethyl-3-oxo-, 1-methylethenyl ester (CA INDEX NAME)



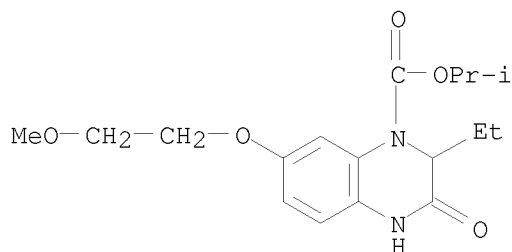
RN 168173-71-5 CAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-3,4-dihydro-6-(2-methoxyethoxy)- (CA INDEX NAME)



RN 168173-78-2 CAPLUS

CN 1(2H)-Quinoxalinecarboxylic acid, 2-ethyl-3,4-dihydro-7-(2-methoxyethoxy)-3-oxo-, 1-methylethyl ester (CA INDEX NAME)



L32 ANSWER 50 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:654834 CAPLUS

DOCUMENT NUMBER: 123:49761

TITLE: Synthesis of Novel Diphenyl Ether Herbicides

AUTHOR(S): Sumida, Motoo; Niwata, Shinjiro; Fukami, Harukazu; Tanaka, Takaharu; Wakabayashi, Ko; Boeger, Peter  
CORPORATE SOURCE: Institute for Biomedical Research, Suntory Limited, Osaka, 618, Japan

SOURCE: Journal of Agricultural and Food Chemistry (1995), 43(7), 1929-34

CODEN: JAFCAU; ISSN: 0021-8561

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 123:49761

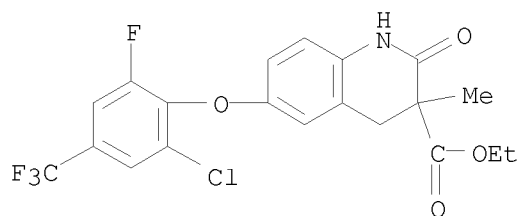
AB The benzoxazine derivs. are a new chemical family of di-Ph ether herbicides, which exhibit a strong peroxidizing herbicidal activity on mono- and dicotyledonous species in preemergence and postemergence tests. Twenty derivs. were synthesized, and their herbicidal activity was determined to examine structure-activity relationships. Among the compds. investigated, the fluorine atom introduction into the trifluoromethylbenzene moiety together with an oxazine ring instead of a nitro group led to the most active herbicide.

IT 164415-40-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and reactions in preparation of benzoxazine herbicides)

RN 164415-40-1 CAPLUS

CN 3-Quinolinecarboxylic acid, 6-[2-chloro-6-fluoro-4-(trifluoromethyl)phenoxy]-1,2,3,4-tetrahydro-3-methyl-2-oxo-, ethyl ester (CA INDEX NAME)



L32 ANSWER 51 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:655665 CAPLUS

DOCUMENT NUMBER: 121:255665

ORIGINAL REFERENCE NO.: 121:46671a, 46674a

TITLE: Preparation of 4-iminoquinolines as virucides

INVENTOR(S): Billhardt-Troughton, Uta Maria; Rosner, Manfred; Bender, Rudolf; Meichsner, Christoph

PATENT ASSIGNEE(S): Hoechst A.-G., Germany

SOURCE: Eur. Pat. Appl., 55 pp.

CODEN: EPXXDW

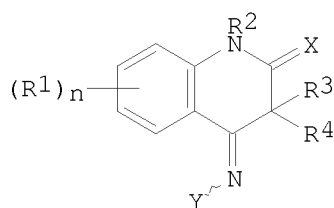
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 579968	A1	19940126	EP 1993-109965	19930622
EP 579968	B1	19990901		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AT 184003	T	19990915	AT 1993-109965	19930622
ES 2136628	T3	19991201	ES 1993-109965	19930622
CA 2099213	A1	19931228	CA 1993-2099213	19930625
CA 2099213	C	20051129		
AU 9341492	A	19940106	AU 1993-41492	19930625
AU 670435	B2	19960718		
ZA 9304576	A	19940131	ZA 1993-4576	19930625
JP 06073012	A	19940315	JP 1993-154064	19930625
JP 3605123	B2	20041222		
HU 70040	A2	19950928	HU 1993-1875	19930625
IL 106147	A	19970610	IL 1993-106147	19930625
CN 1083477	A	19940309	CN 1993-108068	19930626
US 5602146	A	19970211	US 1995-372828	19950113
GR 3031853	T3	20000229	GR 1999-402947	19991117
PRIORITY APPLN. INFO.:			DE 1992-4221210	A 19920627
			US 1993-80845	B1 19930624
OTHER SOURCE(S):		MARPAT 121:255665		
GI				



I

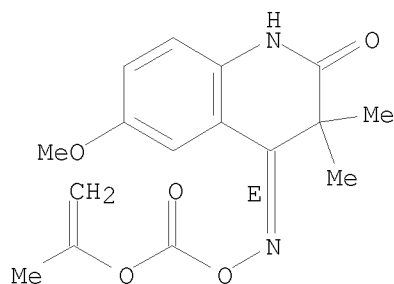
AB Title compds. [I; n = 0-4; R1 = F, Cl, Br, iodo, CF3, CF3O, OH, alkyl, cycloalkyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, nitro, amino, azido, acyl, acyloxy, acylamino, cyano, carbamoyl, carboxy, alkoxycarbonyl, hydroxysulfonyl, sulfamoyl, (substituted) Ph, PhO, PhO2C, etc.; X = O, S, Se, NR2, NOR2; Y = R6, OR6, NR6R7, N:CR6R7, CR6R7R8; R2, R6, R7, R8 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, alkoxycarbonyl, alkylthiocarbonyl, alkylaminocarbonyl, etc.; R3, R4 = H, (substituted) alkyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl; R3R4 = CZ1Z2; Z1, Z2 = R3, with provisos], and tautomers, diastereomers, optical isomers, addition salts, and prodrugs thereof, were prepared Thus, 6-chloro-3,3-dimethyl-1,3-dihydroquinolin-2,4-dione (preparation given) was refluxed with O-ethylhydroxylamine hydrochloride in pyridine and the product was heated with Lawesson's reagent in PhMe to give anti-6-chloro-3,3-dimethyl-4-ethoxyimino-1,3-dihydroquinolin-2-thione. This inhibited HIV in T-cell cultures with a min. inhibitory concentration of <0.008 µg/mL, and inhibited HIV reverse transcriptase with IC50 = 0.004 µg/mL.

IT 158600-89-6P 158601-14-0P 158601-15-1P  
 158601-22-0P 158601-31-1P 158601-33-3P  
 158601-35-5P 158601-37-7P 158601-42-4P  
 158601-45-7P 158601-47-9P 158601-50-4P  
 158601-51-5P 158601-59-3P 158601-61-7P  
 158601-64-0P 158601-66-2P 158601-81-1P  
 158602-10-9P 158602-11-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, as virucide)

RN 158600-89-6 CAPLUS

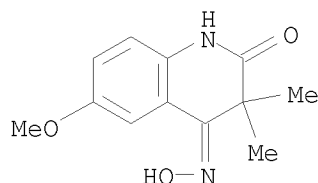
CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-[O-[(1-methylethenyl)oxy]carbonyl]oxime], (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

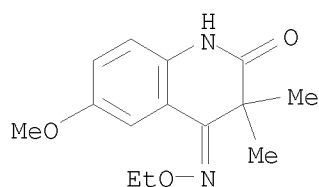


RN 158601-14-0 CAPLUS

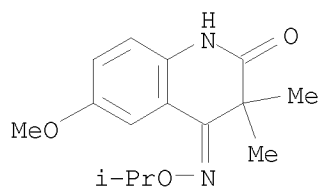
CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-oxime (CA INDEX NAME)



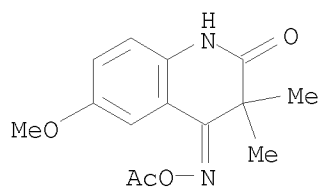
RN 158601-15-1 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-(O-ethyloxime) (CA INDEX NAME)



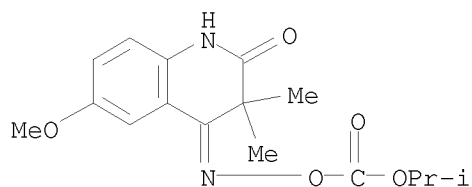
RN 158601-22-0 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-[O-(1-methylethyl)oxime] (CA INDEX NAME)



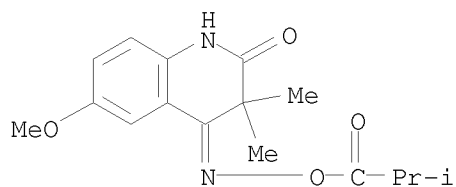
RN 158601-31-1 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-(O-acetyloxime) (CA INDEX NAME)



RN 158601-33-3 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-[O-[(1-methylethoxy)carbonyl]oxime] (9CI) (CA INDEX NAME)

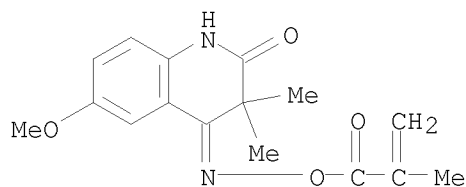


RN 158601-35-5 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-[O-(2-methyl-1-oxopropyl)oxime] (CA INDEX NAME)



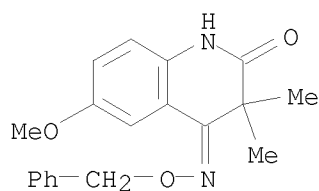
RN 158601-37-7 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-[O-(2-methyl-1-oxo-2-propenyl)oxime] (CA INDEX NAME)



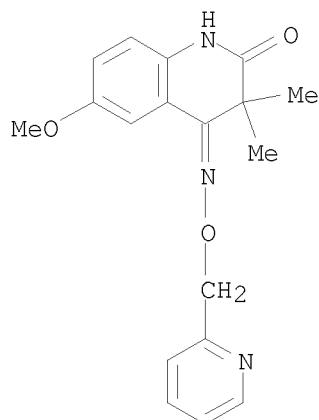
RN 158601-42-4 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-[O-(phenylmethyl)oxime] (CA INDEX NAME)



RN 158601-45-7 CAPLUS

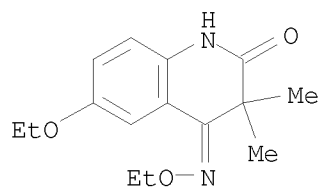
CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-[O-(2-pyridinylmethyl)oxime] (CA INDEX NAME)



RN 158601-47-9 CAPLUS

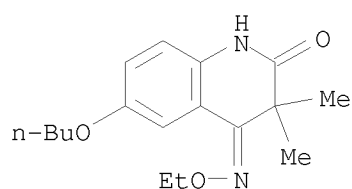
CN 2,4(1H,3H)-Quinolinedione, 6-ethoxy-3,3-dimethyl-, 4-(O-ethyloxime) (CA

INDEX NAME)



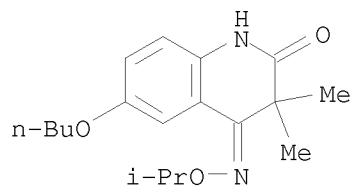
RN 158601-50-4 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 6-butoxy-3,3-dimethyl-, 4-(O-ethyloxime) (CA INDEX NAME)



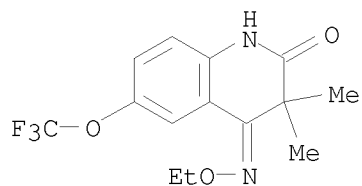
RN 158601-51-5 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 6-butoxy-3,3-dimethyl-, 4-[O-(1-methylethyl)oxime] (CA INDEX NAME)



RN 158601-59-3 CAPLUS

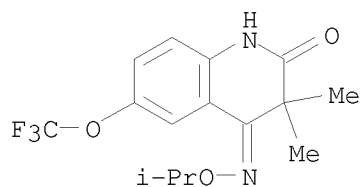
CN 2,4(1H,3H)-Quinolinedione, 3,3-dimethyl-6-(trifluoromethoxy)-, 4-(O-ethyloxime) (CA INDEX NAME)



RN 158601-61-7 CAPLUS

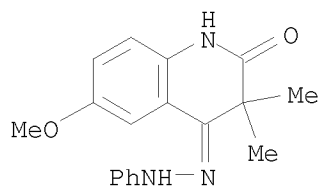
CN 2,4(1H,3H)-Quinolinedione, 3,3-dimethyl-6-(trifluoromethoxy)-, 4-[O-(1-methylethyl)oxime] (CA INDEX NAME)





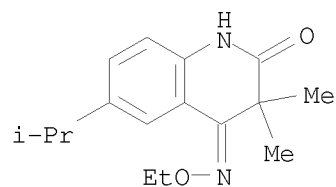
RN 158601-64-0 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-(phenylhydrazone)  
(9CI) (CA INDEX NAME)



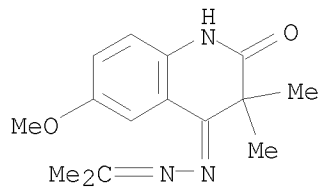
RN 158601-66-2 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 3,3-dimethyl-6-(1-methylethyl)-,  
4-(O-ethyloxime) (CA INDEX NAME)



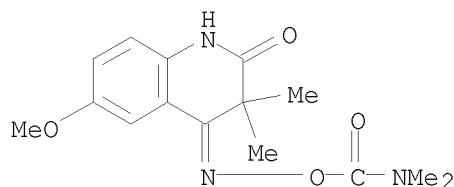
RN 158601-81-1 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-[(1-  
methylethylidene)hydrazone] (9CI) (CA INDEX NAME)



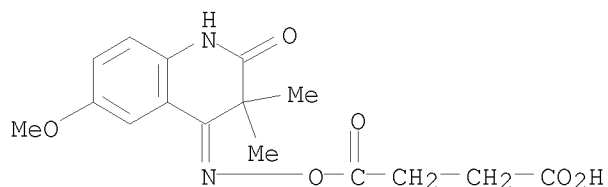
RN 158602-10-9 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl-, 4-[O-  
[(dimethylamino)carbonyl]oxime] (9CI) (CA INDEX NAME)



RN 158602-11-0 CAPLUS

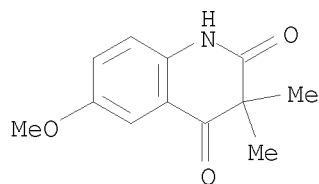
CN Butanoic acid, 4-[[2,3-dihydro-6-methoxy-3,3-dimethyl-2-oxo-4(1H)-quinolinylidene)amino]oxy]-4-oxo- (CA INDEX NAME)



IT 158602-14-3P, 3,3-Dimethyl-6-methoxy-1,3-dihydroquinolin-2,4-dione  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as virucide intermediate)

RN 158602-14-3 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-dimethyl- (CA INDEX NAME)



L32 ANSWER 52 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:292147 CAPLUS

DOCUMENT NUMBER: 120:292147

ORIGINAL REFERENCE NO.: 120:51347a,51350a

TITLE: Preparation of quinolines as herbicides.

INVENTOR(S): Sakagami, Kimie; Fukami, Jiichi; Kawaguchi, Naoko;

Niwada, Shinjiro; Sago, Ryuichi; Igai, Keitaro

PATENT ASSIGNEE(S): Suntory Ltd, Japan; Nat Federation Agric Coop Ass

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

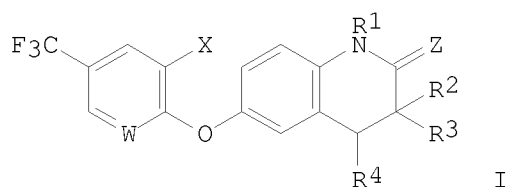
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

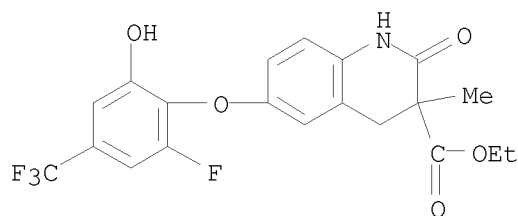
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05339239	A	19931221	JP 1991-174160	19910715
PRIORITY APPLN. INFO.:			JP 1991-174160	19910715
OTHER SOURCE(S):	MARPAT	120:292147		

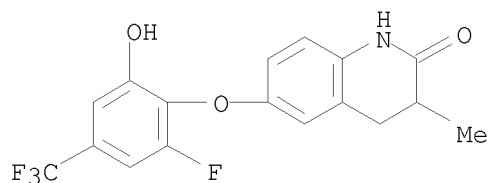
GI



- AB Quinolines I [W = N, CY; Y = H, halo; X = halo; Z = O, S; R1 = H, alkyl [substituted with halo, CN, OH, lower alkoxy, aliphatic acyloxy, (esterified or amidated) CO<sub>2</sub>H], lower alkenyl, lower alkynyl, acyl, phenylalkenyl; R2 = H, lower alkyl; R3 = H, (esterified or amidated) CO<sub>2</sub>H; R4 = H, lower alkyl] are prepared as herbicides. 6-Hydroxy-1,2,3,4-tetrahydro-2-oxoquinoline (3.16 g) was stirred with 4.15 g 3-chloro-4,5-difluorobenzotrifluoride and KOH in DMSO at 130° for 6 h to give 4.87 g 6-(2-chloro-6-fluoro-4-trifluoromethylphenoxy)-1,2,3,4-tetrahydro-2-oxoquinoline, which (0.5 g) was stirred with NaH in DMF for 1 h under ice cooling and stirred with 0.3 g MeI at room temperature for 1 h to give 0.49 g 6-(2-chloro-6-fluoro-4-trifluoromethylphenoxy)-1-methyl-1,2,3,4-tetrahydro-2-oxoquinoline (II). II (at 50 g/10 are) showed almost total preemergence and postemergence control of *Digitaria ciliaris*, *Echinochloa crus-galli*, *Portulaca oleracea*, and other weeds.
- IT 154856-97-0P 154856-99-2P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and herbicidal activity of)
- RN 154856-97-0 CAPLUS
- CN 3-Quinolincarboxylic acid, 6-[2-fluoro-6-hydroxy-4-(trifluoromethyl)phenoxy]-1,2,3,4-tetrahydro-3-methyl-2-oxo-, ethyl ester (CA INDEX NAME)



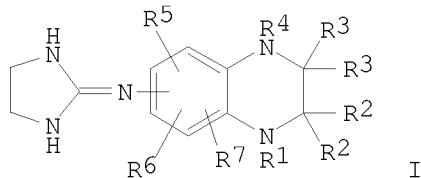
- RN 154856-99-2 CAPLUS
- CN 2(1H)-Quinolinone, 6-[2-fluoro-6-hydroxy-4-(trifluoromethyl)phenoxy]-3,4-dihydro-3-methyl- (CA INDEX NAME)



ACCESSION NUMBER: 1993:649974 CAPLUS  
 DOCUMENT NUMBER: 119:249974  
 ORIGINAL REFERENCE NO.: 119:44605a, 44608a  
 TITLE: Preparation of (2-imidazolin-2-ylamino)quinoxaline derivatives  
 INVENTOR(S): Gluchowski, Charles; Garst, Michael E.; Burke, James A.; Wheeler, Larry A.  
 PATENT ASSIGNEE(S): Allergan, Inc., USA  
 SOURCE: PCT Int. Appl., 42 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9313771	A1	19930722	WO 1993-US264	19930112
W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, RO, RU, SD, SE				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
US 5231096	A	19930727	US 1992-820329	19920113
AU 9334700	A	19930803	AU 1993-34700	19930112
AU 670064	B2	19960704		
EP 620732	A1	19941026	EP 1993-903433	19930112
EP 620732	B1	20010404		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07503015	T	19950330	JP 1993-512627	19930112
AT 200222	T	20010415	AT 1993-903433	19930112
ES 2157216	T3	20010816	ES 1993-903433	19930112
CA 2127542	C	20040803	CA 1993-2127542	19930112
US 5326763	A	19940705	US 1993-10954	19930129
US 5373010	A	19941213	US 1994-195184	19940210
US 5418234	A	19950523	US 1994-298494	19940830
PRIORITY APPLN. INFO.:			US 1992-820329	A 19920113
			US 1989-420817	A3 19891012
			US 1990-560776	A2 19900731
			US 1991-758696	A2 19910912
			WO 1993-US264	A 19930112
			US 1993-10954	A3 19930129
			US 1994-195184	A3 19940210

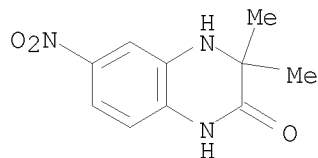
OTHER SOURCE(S): MARPAT 119:249974  
 GI



AB Title compds. I (R1, R4 = H, C1-4 alkyl; R2 = H, C1-4 alkyl, (R2)2 = O; R3 = R2, (R3)2 = O; R5, R6, R7 = H, Ba, Cl, C1-3 alkyl) or a salt thereof, useful as drugs for reduction of pain, and as anesthetic, antiischemic, antiinflammatory and antidiarrhea agents, are prepared 4-

Nitrophenylenediamine in EtOH was added Pd/C, hydrogenated and HCl added to give 1,2,4-triaminobenzene 2HCl which was treated with glyoxal sodium bisulfite to give 6-aminoquinoxaline which was converted in 6 step was converted to I (R1-R4, R6 = R7 = H, R5 = 5-bromo). All I showed a therapeutic effect.

IT 150896-68-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, in preparation of drugs)  
 RN 150896-68-7 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-3,3-dimethyl-6-nitro- (CA INDEX NAME)



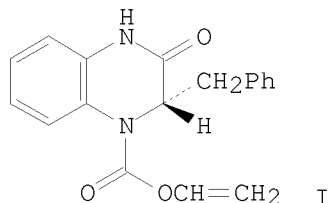
L32 ANSWER 54 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:234088 CAPLUS  
 DOCUMENT NUMBER: 118:234088  
 ORIGINAL REFERENCE NO.: 118:40551a,40554a  
 TITLE: 3,4-dihydro-2-quinoxalinones, 3,4-dihydro-2-quinoxalinethiones and analogs, methods for their preparation and their use as virucides  
 INVENTOR(S): Billhardt, Uta Maria; Roesner, Manfred; Riess, Guenther; Winkler, Irvin; Bender, Rudolf  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
 SOURCE: Eur. Pat. Appl., 111 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 509398	A1	19921021	EP 1992-106158	19920409
EP 509398	B1	20010919		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
DE 4142322	A1	19930701	DE 1991-4142322	19911220
AT 205837	T	20011015	AT 1992-106158	19920409
PT 509398	T	20020228	PT 1992-106158	19920409
ES 2164639	T3	20020301	ES 1992-106158	19920409
IL 101583	A	20000716	IL 1992-101583	19920413
CA 2065985	A1	19921016	CA 1992-2065985	19920414
AU 9214853	A	19921022	AU 1992-14853	19920414
AU 654178	B2	19941027		
ZA 9202722	A	19921125	ZA 1992-2722	19920414
CZ 293825	B6	20040818	CZ 1992-1136	19920414
HU 61004	A2	19921130	HU 1992-1288	19920415
HU 224439	B1	20050928		
JP 05148243	A	19930615	JP 1992-119936	19920415
US 6369057	B1	20020409	US 1995-418896	19950407
HK 1011971	A1	20020517	HK 1998-113024	19981209
PRIORITY APPLN. INFO.:			DE 1991-4112234	A 19910415
			DE 1991-4142322	A 19911220
			US 1992-867512	B2 19920413

OTHER SOURCE(S):  
GI

CASREACT 118:234088; MARPAT 118:234088



AB Some 3,4-dihydro-2-quinoxalinone derivs. and 3,4-dihydro-2-quinoxalinethione derivs. and nitrogen and selenium analogs thereof are claimed. Also claimed are 1,2,3,4-tetrahydro-2-(alkoxy)quinoxalines and 1,2,3,4-tetrahydro-2-(alkylthio)quinoxalines and selenium and nitrogen analogs thereof. A process for the preparation of said compds. is claimed. The use of said compds. as virucides, especially for the inhibition of HIV, is claimed. Acylation of (S)-3-benzyl-7-chloro-3,4-dihydroquinoxalin-2(1H)-one with vinyl chloroformate gave (S)-3-benzyl-7-chloro-3,4-dihydro-4-[(vinylloxy)carbonyl]quinoxalin-2(1H)-one (I). The min. inhibitory concentration

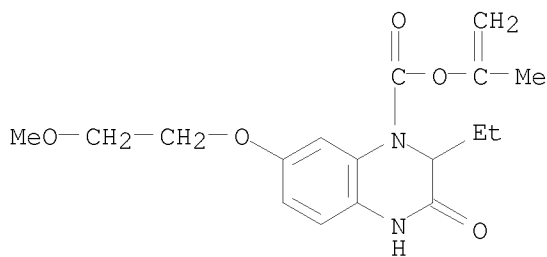
of I for HIV-infected lymphocytes (5x10<sup>5</sup> cells/mL) was <0.16 µg/mL. I inhibited HIV reverse transcriptase.

IT 146738-29-6P 146738-60-5P 146738-61-6P  
146739-16-4P 146739-17-5P 146739-29-9P  
146739-30-2P 146739-34-6P 146739-40-4P  
146739-72-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as virucide (HIV inhibitor))

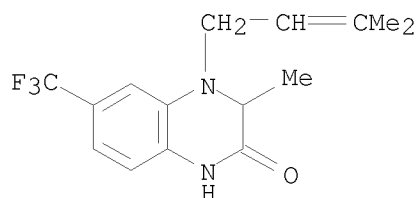
RN 146738-29-6 CAPLUS

CN 1(2H)-Quinoxalinecarboxylic acid, 2-ethyl-3,4-dihydro-7-(2-methoxyethoxy)-3-oxo-, 1-methylethenyl ester (CA INDEX NAME)

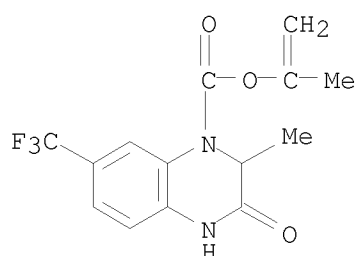


RN 146738-60-5 CAPLUS

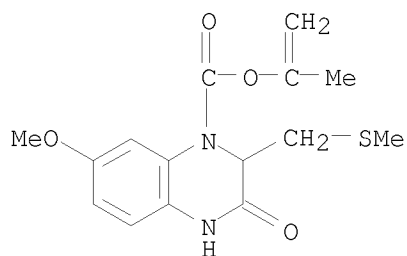
CN 2(1H)-Quinoxalinone, 3,4-dihydro-3-methyl-4-(3-methyl-2-butenyl)-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



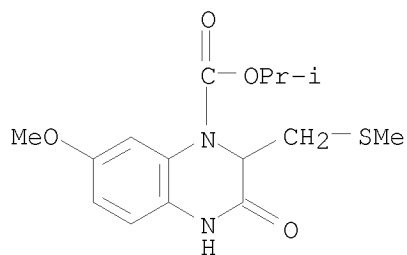
RN 146738-61-6 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-2-methyl-3-oxo-7-(trifluoromethyl)-, 1-methylethenyl ester (CA INDEX NAME)



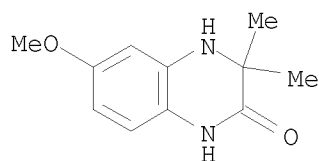
RN 146739-16-4 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-[(methylthio)methyl]-3-oxo-, 1-methylethenyl ester (CA INDEX NAME)



RN 146739-17-5 CAPLUS  
 CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2-[(methylthio)methyl]-3-oxo-, 1-methylethyl ester (CA INDEX NAME)

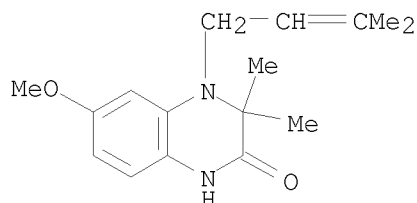


RN 146739-29-9 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3,3-dimethyl- (CA INDEX NAME)



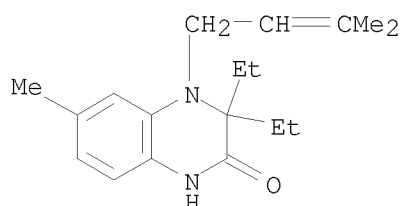
RN 146739-30-2 CAPLUS

CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3,3-dimethyl-4-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



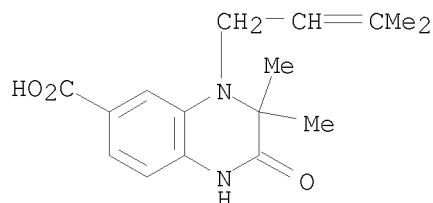
RN 146739-34-6 CAPLUS

CN 2(1H)-Quinoxalinone, 3,3-diethyl-3,4-dihydro-6-methyl-4-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



RN 146739-40-4 CAPLUS

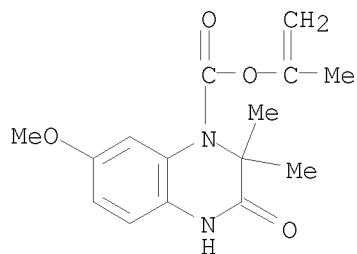
CN 6-Quinoxalinecarboxylic acid, 1,2,3,4-tetrahydro-3,3-dimethyl-4-(3-methyl-2-butenyl)-2-oxo- (9CI) (CA INDEX NAME)



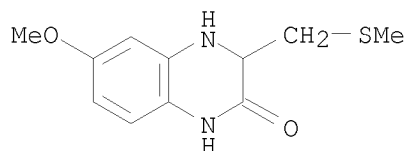
RN 146739-72-2 CAPLUS

CN 1(2H)-Quinoxalinecarboxylic acid, 3,4-dihydro-7-methoxy-2,2-dimethyl-3-oxo-, 1-methylethenyl ester (CA INDEX NAME)



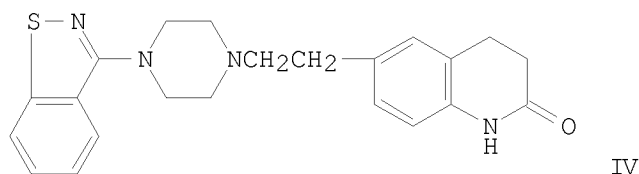
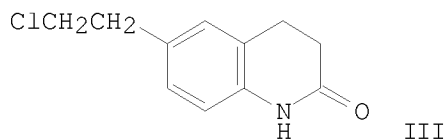
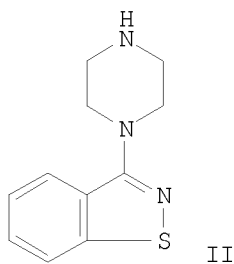
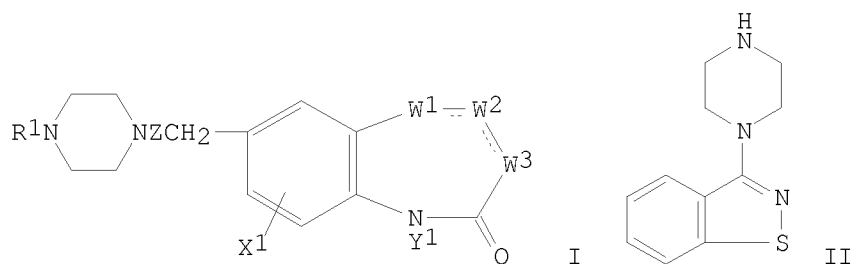


IT 147245-28-1, 3,4-Dihydro-6-methoxy-3-[(methylthio)methyl]quinoxalin-2(1H)-one  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant for (alkyl)dihydroquinoxalinone derivative (virucide, HIV inhibitor))  
 RN 147245-28-1 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-methoxy-3-[(methylthio)methyl]- (CA INDEX NAME)



L32 ANSWER 55 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1991:492295 CAPLUS  
 DOCUMENT NUMBER: 115:92295  
 ORIGINAL REFERENCE NO.: 115:15891a,15894a  
 TITLE: Preparation of heteroaryl piperazines as antipsychotic agents  
 INVENTOR(S): Howard, Harry R.  
 PATENT ASSIGNEE(S): Pfizer Inc., USA  
 SOURCE: Eur. Pat. Appl., 20 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 409435	A1	19910123	EP 1990-307166	19900629
EP 409435	B1	19941026		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
WO 9100863	A1	19910124	WO 1989-US2954	19890707
W: FI, HU, NO, RO, SU, US				
ES 2062374	T3	19941216	ES 1990-307166	19900629
JP 03044388	A	19910226	JP 1990-176120	19900703
JP 07017633	B	19950301		
CA 2020611	A1	19910108	CA 1990-2020611	19900706
US 5350747	A	19940927	US 1992-836019	19920220
PRIORITY APPLN. INFO.:			WO 1989-US2954	A 19890707
OTHER SOURCE(S):	CASREACT 115:92295; MARPAT 115:92295			
GI				



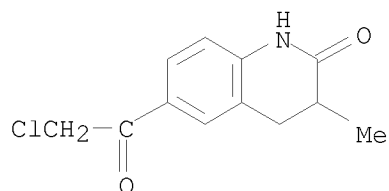
AB The title compds. [I; W1 = CR2R3; W2 = CR4R5; W3 = CR6R7; 1 of W1-W3 may be absent; R1 = (substituted) benzisoxazolyl, benzisothiazolyl, benzopyrazolyl; R2-R7 = H, alkyl, 2 of them may form alkylene, alkenylene; X1 = H, halo, C1-4 alkyl, alkoxy, NO2, cyano, etc.; Y1 = H, C1-4 alkyl, (substituted) Ph, etc.; X1Y1 = heterocyclyl; Z = C1-6 alkylene], useful as antipsychotic agents (no data), were prepared A mixture of piperazine derivative II, quinolinone III (preparation given), Na2CO3, and KI in MIBK was heated at 90° under N to give 13% title compound IV, separated as HCl.1/2 H2O. Also prepared were 17 addnl. I and numerous intermediates.

IT 133998-79-5P 133998-80-8P 133998-92-2P 133998-94-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction of, in preparation of antipsychotic agent)

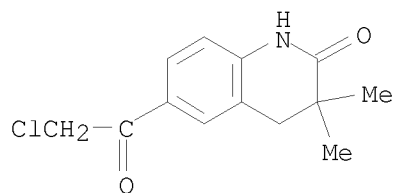
RN 133998-79-5 CAPLUS

CN 2(1H)-Quinolinone, 6-(chloroacetyl)-3,4-dihydro-3-methyl- (9CI) (CA INDEX NAME)

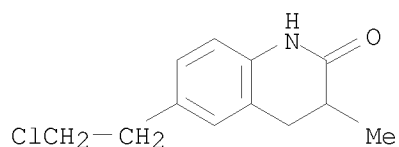


RN 133998-80-8 CAPLUS

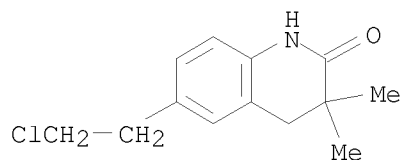
CN 2(1H)-Quinolinone, 6-(chloroacetyl)-3,4-dihydro-3,3-dimethyl- (9CI) (CA INDEX NAME)



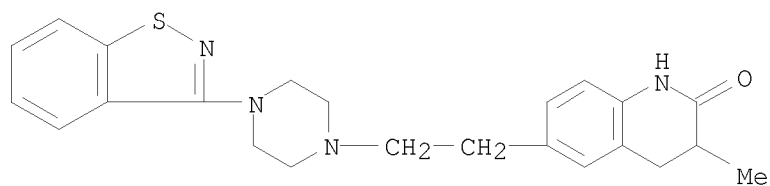
RN 133998-92-2 CAPLUS  
 CN 2(1H)-Quinolinone, 6-(2-chloroethyl)-3,4-dihydro-3-methyl- (CA INDEX NAME)



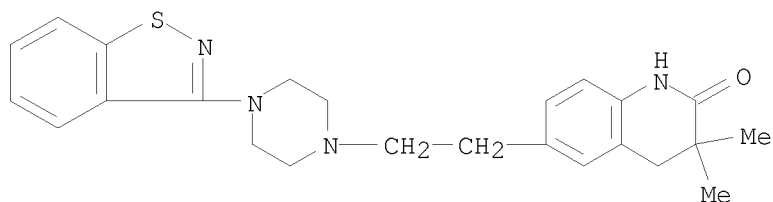
RN 133998-94-4 CAPLUS  
 CN 2(1H)-Quinolinone, 6-(2-chloroethyl)-3,4-dihydro-3,3-dimethyl- (CA INDEX NAME)



IT 134017-22-4P 134017-24-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as antipsychotic agent)  
 RN 134017-22-4 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[2-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-3,4-dihydro-3-methyl- (CA INDEX NAME)



RN 134017-24-6 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[2-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-3,4-dihydro-3,3-dimethyl- (CA INDEX NAME)



L32 ANSWER 56 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:405516 CAPLUS

DOCUMENT NUMBER: 113:5516

ORIGINAL REFERENCE NO.: 113:1079a,1082a

TITLE: Imine-enamine tautomerism in the ion source

AUTHOR(S): Madhusudanan, K. P.; Borthakur, N.; Goswami, M.

CORPORATE SOURCE: Cent. Drug Res. Inst., Lucknow, 226 001, India

SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1990), 29B(1), 14-17

CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal

LANGUAGE: English

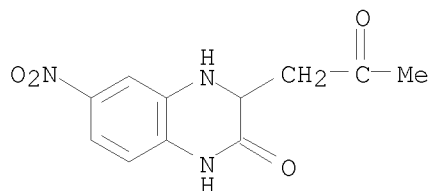
AB The electron impact induced fragmentation of 3-substituted quinoxalinones can be explained only by invoking an enamine→imine tautomerism in the ion source. Loss of CO from the mol. ion is characteristic of the enamine form, while imine form fragments mainly by the elimination of CH<sub>2</sub>CO. The ratio of the ion abundances (M-CH<sub>2</sub>CO)<sup>+</sup>•/(M-CO)<sup>+</sup>• increases with increase in source temperature indicating a temperature-induced shift in the tautomeric equilibrium. A comparison of the electron impact, mass analyzed ion kinetic energy and collisional activation spectra show that the decomposing and nondecomposing mol. ions have different tautomeric equilibrium

IT 75078-75-0

RL: PRP (Properties)  
(mass spectrum of)

RN 75078-75-0 CAPLUS

CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-nitro-3-(2-oxopropyl)- (CA INDEX NAME)



L32 ANSWER 57 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:497293 CAPLUS

DOCUMENT NUMBER: 111:97293

ORIGINAL REFERENCE NO.: 111:16377a,16380a

TITLE: Preparation of substituted thiadiazinyllindolones or-quinolones useful in the treatment of heart or asthmatic diseases

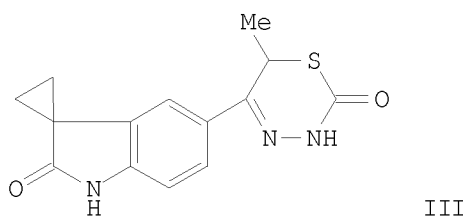
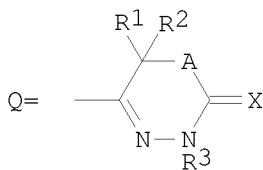
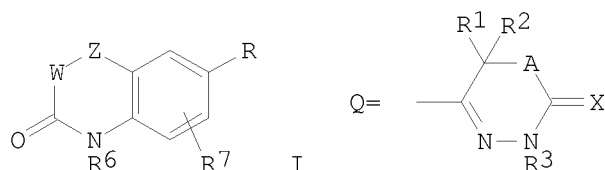
INVENTOR(S): Martin, Michel; Nadler, Guy; Zimmermann, Richard

PATENT ASSIGNEE(S): Laboratoires Sobio S. A., Fr.

SOURCE: Eur. Pat. Appl., 59 pp.

CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 303418	A2	19890215	EP 1988-307281	19880805
EP 303418	A3	19901107		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DK 8804452	A	19890212	DK 1988-4452	19880809
AU 8820566	A	19890216	AU 1988-20566	19880809
ZA 8805841	A	19890927	ZA 1988-5841	19880809
US 4933336	A	19900612	US 1988-230314	19880809
JP 01110681	A	19890427	JP 1988-198136	19880810
PRIORITY APPLN. INFO.:			GB 1987-18957	A 19870811
			GB 1988-11276	A 19880512
OTHER SOURCE(S):	MARPAT 111:97293			
GI				

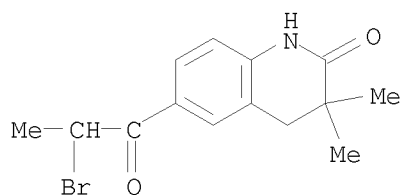


AB The title compds. [I; R = Q; R1 = H, lower alkyl, CH2OR6; R2, R3 = H, lower alkyl; W, Z = different CR4R5, (CR8R9)n; R4 = H, C1-3 alkyl, C1-3 alkylthio, C1-3 alkoxy; R5 = C1-3 alkyl, C1-3 alkylthio, C1-3 alkoxy; or CR4R5 = 3 to 6-membered carbocyclic ring or heterocyclic ring containing 1 or 2 ring O, N, or S; or R4R5 = O, CH2; R6 = H, lower alkyl, alkylcarbonyl, heteroarylcarbonyl, aralkylcarbonyl, (un)substituted CONH2, lower alkoxy carbonyl, aryloxy carbonyl; R7 = H, lower alkyl; R8, R9 = H, C1-3 alkyl; n = 0, 1; X = O, S; A = O, S] (II), were prepared 5-[(2-Chloro-1-oxo)propyl]-spiro[cyclopropane-1,3'-[3H]-indol]-2'-(1'H)-one (preparation given), MeOC(S)NHNH2, and MeCN were refluxed 6 h to give 49% thiadiazinyllindolone (III). III at 0.03 mg/kg p.o. showed cardiostimulant activity in male beagle dogs with first derivative of left ventricular pressure (dP/dt, mmHg/s) = +105 and heart rate (beats/min) = +21.

IT 122281-25-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as intermediate for cardiostimulant and antiasthmatic thiadiazinyllindolone and -quinolone)

RN 122281-25-8 CAPLUS

CN 2(1H)-Quinolinone, 6-(2-bromo-1-oxopropyl)-3,4-dihydro-3,3-dimethyl- (CA INDEX NAME)



L32 ANSWER 58 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:154319 CAPLUS

DOCUMENT NUMBER: 110:154319

ORIGINAL REFERENCE NO.: 110:25527a,25530a

TITLE: Preparation of 6-heterocyclylcarbostyryl derivatives for treatment of heart diseases

INVENTOR(S): Tamada, Shigeharu; Fujioka, Takafumi; Ogawa, Hidenori; Teramoto, Shuji; Kondo, Kazumi

PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

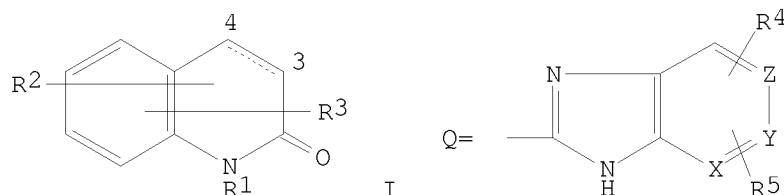
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63230687	A	19880927	JP 1987-65202	19870318
JP 07121937	B	19951225		
PRIORITY APPLN. INFO.:			JP 1987-65202	19870318
OTHER SOURCE(S):	MARPAT 110:154319			

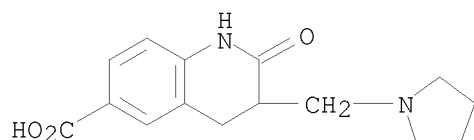
GI



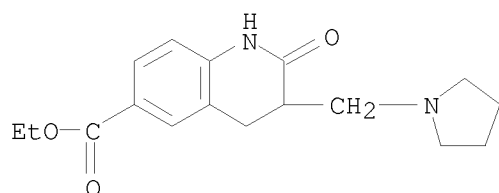
AB The title compds. [I, R1 = H, lower alkyl, lower alkenyl, phenyl-lower alkyl; R2 = Q (wherein X, Y, Z = CH or N, R4, R5 = H, lower alkoxy, halo, or NH2); R3 = H, halo, NO2, NH2, lower alkanoylamino, lower alkoxy, OH, lower alkyl, lower alkylthio, saturated 5- or 6-membered (lower alkyl) heterocyclyl, 5- or 6-membered heterocyclyl-lower alkyl; the linkage between 3- and 4-position is a single or double bond] were prepared as cardiotonics, etc. 7-Methoxy-6-carboxy-3,4-dihydrocarbostyryl 0.3 and 3,4-diaminopyridine 0.16 g were added to a 1:10 mixture of P2O5 and Me2SO3H. The mixture was heated 2 h at 100°, poured into ice-water, and made weakly alkaline with 10% aqueous NaOH and saturated NaHCO3. The precipitated crystals were

removal by filtration, washed with H2O, dried and purified on a silica gel chromatog. to give, after acidification with HCl in EtOH, 0.29 g 7-methoxy-6-[1H-imidazo[4,5-c]pyridin-2-yl]-3,4-dihydrocarbostyryl (II)-HCl.H2O. II.HCl.H2O at 300 n mol increased myocardial contractility 23.1% and coronary blood flow 0.4 mL/min in dog heart in vitro. 1 ML ampules were formulated from II 500, polyethyleneglycol 0.3, NaCl 0.9,

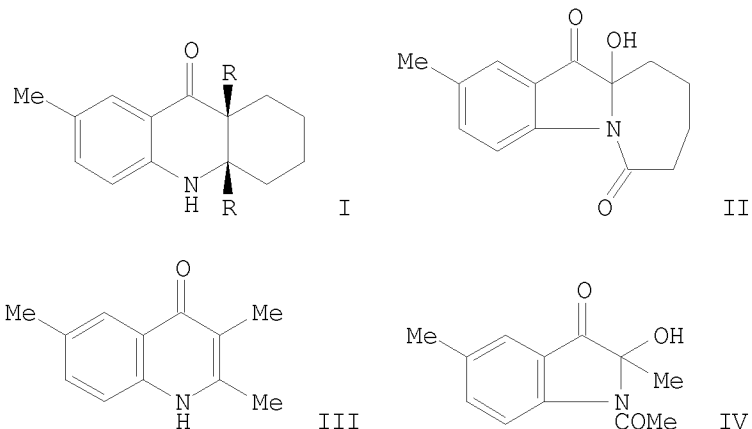
polyoxyethylenesorbitan monooleate 0.4, sodium metabisulfite 0.1,  
 methylparaben 0.18, propylparaben 0.02 g, and water 100 mL.  
 IT 119715-08-1P 119715-18-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as intermediate for heterocyclylcarbostyrl cardiotonic)  
 RN 119715-08-1 CAPLUS  
 CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-2-oxo-3-(1-  
 pyrrolidinylmethyl)- (CA INDEX NAME)



RN 119715-18-3 CAPLUS  
 CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-2-oxo-3-(1-  
 pyrrolidinylmethyl)-, ethyl ester (CA INDEX NAME)



L32 ANSWER 59 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:114666 CAPLUS  
 DOCUMENT NUMBER: 110:114666  
 ORIGINAL REFERENCE NO.: 110:18905a,18908a  
 TITLE: Chlorine-free oxidation products from sodium  
 hypochlorite acting on a 1,2,3,4-tetrahydro-9(10H)-  
 acridinone and on a related 4(1H)-quinolinone  
 AUTHOR(S): Boeyens, Jan C. A.; Denner, Louis; Marais, Johannes L.  
 C.; Staskun, Benjamin  
 CORPORATE SOURCE: Dep. Chem., Univ. Witwatersrand, S. Afr.  
 SOURCE: South African Journal of Chemistry (1988), 41(2), 63-7  
 CODEN: SAJCDG; ISSN: 0379-4350  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



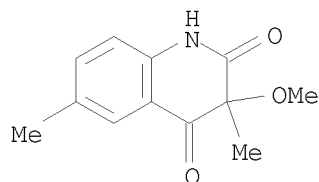
AB Treatment of tetrahydroacridinone I (R2 = bond) with NaOCl in aqueous alkali-methanol solution gave a mixture of cis-diol derivative I (R = OH) and azepinoindole II; the structure of the latter product was established from x-ray crystallog. anal. Mol. mechanics simulation indicated that the formation of a ten-membered macrocyclic precursor for II was not favored stereochem. From the corresponding quinolinone III and NaOCl, indolone IV was obtained. Possible mechanistic pathways leading to the resp. products are discussed.

IT 119373-47-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 119373-47-6 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 3-methoxy-3,6-dimethyl- (CA INDEX NAME)



L32 ANSWER 60 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:630841 CAPLUS

DOCUMENT NUMBER: 109:230841

ORIGINAL REFERENCE NO.: 109:38177a,38180a

TITLE: Synthesis of 3,4-dihydro-4-methyl-2-(3-quinolyl)-2H-pyrano[3,2-c]quinolines

AUTHOR(S): Kumaraswami, K.; Shanmugam, P.

CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046, India

SOURCE: Tetrahedron Letters (1988), 29(18), 2235-8

CODEN: TELEAY; ISSN: 0040-4039

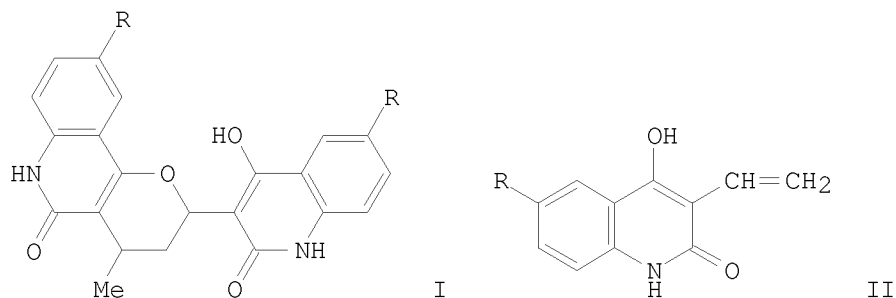
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 109:230841

GI



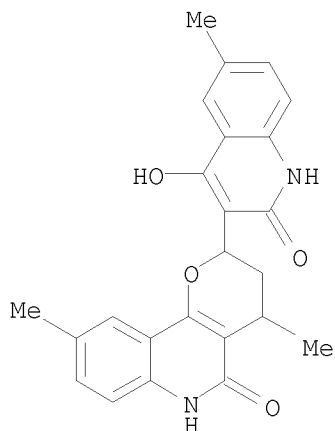


AB Attempted Dieckmann cyclization of 4,2-R(MeO<sub>2</sub>C)C<sub>6</sub>H<sub>3</sub>NHCOCH<sub>2</sub>CH:CH<sub>2</sub> (R = H, Me, Br) gave instead dihydropyrano[3,2-c]quinolines I from a cycloaddn. of the vinyl group in the initially formed cyclization product II with the heterodiene of its tautomer.

IT 117586-98-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and chlorination of, with phosphorus oxychloride)

RN 117586-98-8 CAPLUS

CN 5H-Pyrano[3,2-c]quinolin-5-one, 2-(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)-2,3,4,6-tetrahydro-4,9-dimethyl- (CA INDEX NAME)



L32 ANSWER 61 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:636662 CAPLUS

DOCUMENT NUMBER: 107:236662

ORIGINAL REFERENCE NO.: 107:38024h,38025a

TITLE: The reaction of tetraethoxycarbonyl ethylene with aromatic 1,2-diamines

AUTHOR(S): Yamada, Yoichi; Kishi, Kunio; Yasuda, Heinosuke

CORPORATE SOURCE: Coll. Educ., Utsunomiya Univ., Utsunomiya, Japan

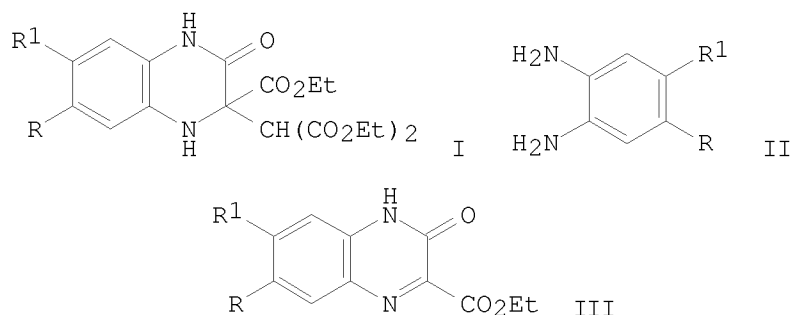
SOURCE: Utsunomiya Daigaku Kyoikugakubu Kiyo, Dai-2-bu (1987), 37, 49-55

CODEN: UDKKBI; ISSN: 0385-2415

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

GI

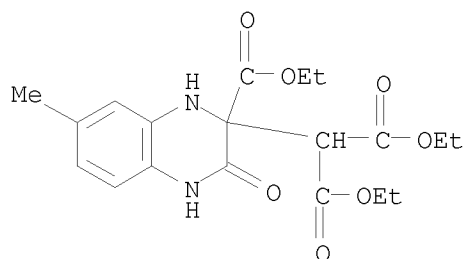


AB Tetrahydroquinoxalines I (R = R1 = H, Me; R = Me, R1 = H; R = Cl, R1 = H) were prepared in >75% yield by reaction of (EtO2C)2C:C(CO2Et)2 with phenylenediamines II in EtOH for 2 h., whereas the reaction in EtOH for 72 h. at 100° gave I as well as decomposed products III and CH2(CO2Et)2. The rate of decomposition of I to III was increased with an increasing number of Me groups in I.

IT 111425-79-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 111425-79-7 CAPLUS

CN Propanedioic acid, [2-(ethoxycarbonyl)-1,2,3,4-tetrahydro-7-methyl-3-oxo-2-quinoxaliny]-, diethyl ester (9CI) (CA INDEX NAME)



L32 ANSWER 62 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:438344 CAPLUS

DOCUMENT NUMBER: 99:38344

ORIGINAL REFERENCE NO.: 99:6021a,6024a

TITLE: Suicide inhibitors of proteases. Lack of activity of halomethyl derivatives of some aromatic lactams

AUTHOR(S): Decodts, Guy; Wakselman, Michel

CORPORATE SOURCE: CERCOA, CNRS, Thiais, 94320, Fr.

SOURCE: European Journal of Medicinal Chemistry (1983), 18(2), 107-11

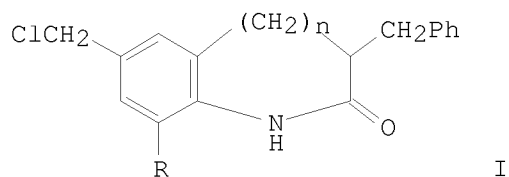
CODEN: EJMCA5; ISSN: 0009-4374

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 99:38344

GI



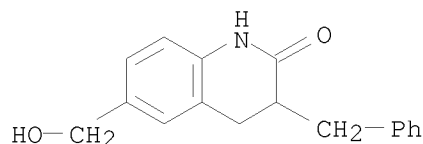
AB The lactams I ( $n = 1, 2$ ,  $R = H$ ) were prepared via reductive cyclization of 2,5-O<sub>2</sub>N(EtO<sub>2</sub>C)C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>C(CO<sub>2</sub>Et)<sub>2</sub>CH<sub>2</sub>Ph or 2,5-O<sub>2</sub>N(EtO<sub>2</sub>C)C<sub>6</sub>H<sub>3</sub>CH(CO<sub>2</sub>Et)<sub>2</sub>, resp. I ( $n = 2$ ,  $R = NO_2$ ) was obtained by nitrating I ( $n = 2$ ,  $R = H$ ). I have a latent electrophilic quinonimine methide function and a benzyl side chain, both characteristic of  $\alpha$ -chymotrypsin substrates, but are inactive against this enzyme.

IT 86400-54-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and chlorination of)

RN 86400-54-6 CAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-6-(hydroxymethyl)-3-(phenylmethyl)- (CA INDEX NAME)

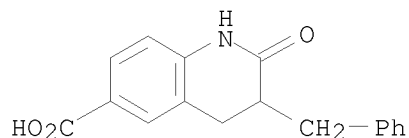


IT 86400-53-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reduction of)

RN 86400-53-5 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2,3,4-tetrahydro-2-oxo-3-(phenylmethyl)- (CA INDEX NAME)

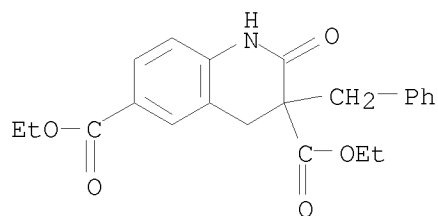


IT 86413-23-2P

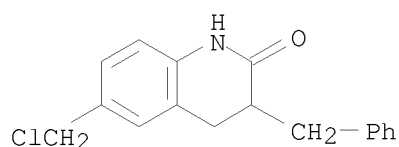
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation, hydrolysis, and decarboxylation of)

RN 86413-23-2 CAPLUS

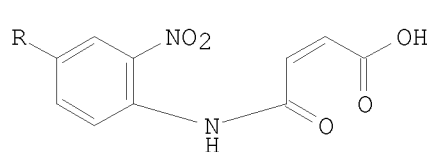
CN 3,6-Quinolinedicarboxylic acid, 1,2,3,4-tetrahydro-2-oxo-3-(phenylmethyl)-, diethyl ester (9CI) (CA INDEX NAME)



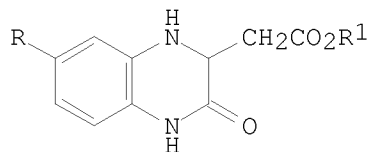
IT 86400-55-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation, nitration, and chymotrypsin-inhibiting activity of)  
 RN 86400-55-7 CAPLUS  
 CN 2(1H)-Quinolinone, 6-(chloromethyl)-3,4-dihydro-3-(phenylmethyl)- (CA  
 INDEX NAME)



L32 ANSWER 63 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1983:215569 CAPLUS  
 DOCUMENT NUMBER: 98:215569  
 ORIGINAL REFERENCE NO.: 98:32781a,32784a  
 TITLE: Reactions of cyclic anhydrides. Part VII. Reductive  
 cyclization of 2-nitromaleanilates and  
 2-nitrofumaranilates, a new synthesis of  
 2-oxo-1,2,3,4-tetrahydroquinoxalines  
 AUTHOR(S): Wagh, S. B.; Balasubramaniyan, P.; Balasubramaniyan,  
 V.  
 CORPORATE SOURCE: Sci. Res. Cent., R. Y. K. Sci. Coll., Nasik, 422 005,  
 India  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1982),  
 21B(12), 1071-3  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 98:215569  
 GI



I



II

AB Fusion of o-nitroanilines with maleic anhydride in the presence of anhydrous  
 AlCl<sub>3</sub> at 80-100° selectively furnishes the corresponding maleanilic  
 acids I (R = Cl, Me, MeO, H) and at 160-200, the fumaranilic acids in

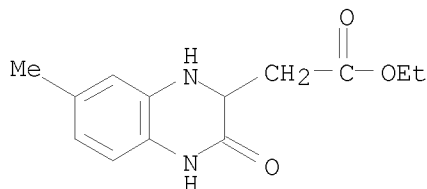
excellent yields. Their methyl/ethyl esters on reductive cyclization with W-2 Raney nickel (40 psi, 2 h, ethanol, 25°) give 1,2,3,4-tetrahydro-2-oxo-3-quinoxalineacetates II CR = Cl, Me, MeO, H, R1 = Et; R = Cl, R1 = Me) in 70-80% yield.

IT 85919-02-4P 85919-03-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

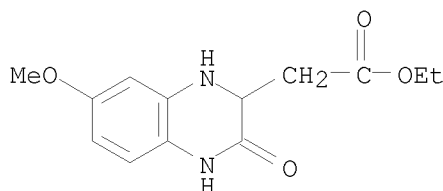
RN 85919-02-4 CAPLUS

CN 2-Quinoxalineacetic acid, 1,2,3,4-tetrahydro-7-methyl-3-oxo-, ethyl ester  
(CA INDEX NAME)



RN 85919-03-5 CAPLUS

CN 2-Quinoxalineacetic acid, 1,2,3,4-tetrahydro-7-methoxy-3-oxo-, ethyl ester  
(CA INDEX NAME)



L32 ANSWER 64 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:123047 CAPLUS

DOCUMENT NUMBER: 96:123047

ORIGINAL REFERENCE NO.: 96:20213a,20216a

TITLE: Synthesis of quinoline alkaloids and related compounds. Synthesis of zanthophylline and a new synthesis of 3,3-bis( $\gamma,\gamma$ -dimethylallyl)-N-methyl-2,4-dioxo-1,2,3,4-tetrahydroquinoline

AUTHOR(S): Venturella, Pietro; Bellino, Aurora; Marino, Maria Luisa

CORPORATE SOURCE: Inst. Org. Chem., Univ. Palermo, Palermo, 90123, Italy

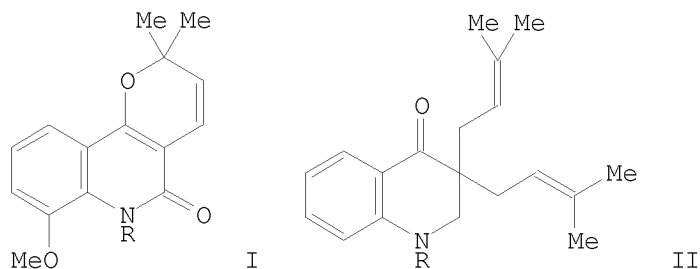
SOURCE: Heterocycles (1981), 16(11), 1873-7

CODEN: HTCYAM; ISSN: 0385-5414

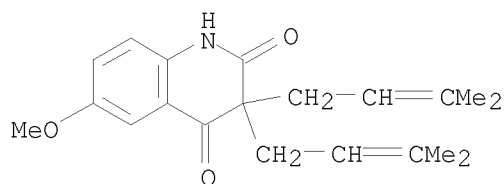
DOCUMENT TYPE: Journal

LANGUAGE: English

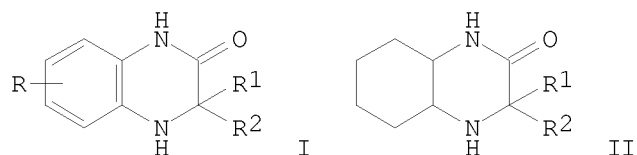
GI



AB Zanthophylline (I, R = CH<sub>2</sub>OAc) was prepared by alkylation of  
 8-methoxyflindersine (I, R = H) with AcOCH<sub>2</sub>Cl. The isoquinoline II (R =  
 Me) was prepared by direct methylation of II (R = H).  
 IT 56470-54-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (methylation of)  
 RN 56470-54-3 CAPLUS  
 CN 2,4(1H,3H)-Quinolinedione, 6-methoxy-3,3-bis(3-methyl-2-butenyl)- (9CI)  
 (CA INDEX NAME)



L32 ANSWER 65 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1982:122752 CAPLUS  
 DOCUMENT NUMBER: 96:122752  
 ORIGINAL REFERENCE NO.: 96:20161a,20164a  
 TITLE: Hindered amines. Part 4. 3,3-Dialkyl-1,2,3,4-  
 tetrahydro-2-quinoxalinones and cis- and  
 trans-3,3-dialkyldecahydro-2-quinoxalinones  
 AUTHOR(S): Lai, John T.  
 CORPORATE SOURCE: BF Goodrich Co., Res. Dev. Cent., Brecksville, OH,  
 44141, USA  
 SOURCE: Synthesis (1982), (1), 71-4  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 96:122752  
 GI



AB Tetrahydroquinoxalinones I [R = H; R<sub>1</sub> = Me, R<sub>2</sub> = Me, hexyl; R<sub>1</sub>R<sub>2</sub> = (CH<sub>2</sub>)<sub>4</sub>,

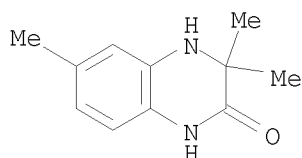
(CH<sub>2</sub>)<sub>5</sub>] were obtained by treating o-(H<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>4</sub> with R<sub>1</sub>R<sub>2</sub>CO and CHCl<sub>3</sub>. I (R = 6-Me, 7-Me, 6-Cl, 7-Cl, R<sub>1</sub> = R<sub>2</sub> = Me) were obtained from 3,4-(H<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>R and Cl<sub>3</sub>CCMe<sub>2</sub>OH. Rh-C hydrogenation of I (R = H) gave cis-II. trans-II were obtained from HOCrR<sub>2</sub>CN and 1,2-cyclohexanediamine.

IT 81016-65-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 81016-65-1 CAPLUS

CN 2(1H)-Quinoxalinone, 3,4-dihydro-3,3,6-trimethyl- (CA INDEX NAME)



L32 ANSWER 66 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1981:147502 CAPLUS

DOCUMENT NUMBER: 94:147502

ORIGINAL REFERENCE NO.: 94:24017a,24020a

TITLE: Electrochemical modeling of the dehydrogenation of heterocycles. Oxidation of 3,4-dihydroquinoxalin-2-one derivatives

AUTHOR(S): Sosonkin, I. M.; Strogov, G. N.; Charushin, V. N.; Chupakhin, O. N.

CORPORATE SOURCE: Vses. Nauchno-Issled. Proektn., Sverdlovsk, 620002, USSR

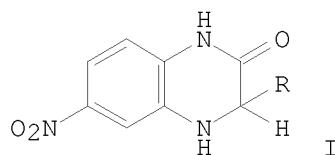
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1981), (2), 261-3

CODEN: KGSSAQ; ISSN: 0453-8234

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI

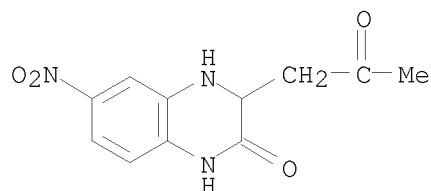


AB To quant. evaluate the resistance of the dihydro compds. I (where R = 2-hydroxocyclohexyl, CH(COMe)CO<sub>2</sub>Et, and CH<sub>2</sub>COMe) toward oxidation and the appearance of peculiarities in their dehydrogenation, the principles were studied of the electrochem. oxidation of I on a rotating ring-disk electrode in DMF. Thus, a study of the electrochem. behavior of the products of addition of ketones to 6-nitroquinoxalin-2-ones showed that they are oxidized with subsequent splitting off of 2 electrons (E) and 2 protons (P); and depending on the acid-base properties of the medium the sequence is EPEP or PEEP.

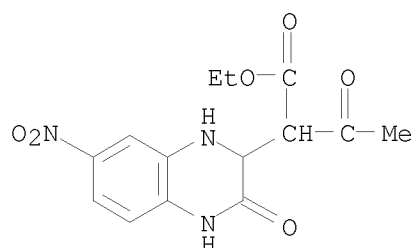
IT 75078-75-0 75078-77-2 75078-80-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(oxidation of, electrochem., modeling of)

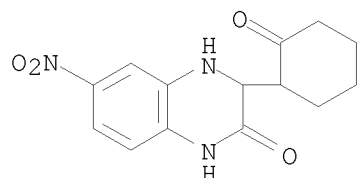
RN 75078-75-0 CAPLUS  
CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-nitro-3-(2-oxopropyl)- (CA INDEX NAME)



RN 75078-77-2 CAPLUS  
CN 2-Quinoxalineacetic acid,  $\alpha$ -acetyl-1,2,3,4-tetrahydro-7-nitro-3-oxo-, ethyl ester (CA INDEX NAME)



RN 75078-80-7 CAPLUS  
CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-nitro-3-(2-oxocyclohexyl)- (CA INDEX NAME)



L32 ANSWER 67 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1981:15669 CAPLUS

DOCUMENT NUMBER: 94:15669

ORIGINAL REFERENCE NO.: 94:2623a,2626a

TITLE: Reactions of azines and azinones with enamines.  
Cyclization through the ortho-binding of a heteroaromatic system in a reaction with quinoxaline derivatives

AUTHOR(S): Chupakhin, O. N.; Charushin, V. N.; Shnurov, Yu. V.

CORPORATE SOURCE: Ural. Politekh. Inst., Sverdlovsk, USSR

SOURCE: Zhurnal Organicheskoi Khimii (1980), 16(5), 1064-71

CODEN: ZORKAE; ISSN: 0514-7492

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 94:15669

GI For diagram(s), see printed CA Issue.

AB Enamines of aldehydes and ketones react with 6-nitro-2-quinoxalone to give products of addition at the 3 position [I; R = CH<sub>2</sub>COMe, CH(COMe)<sub>2</sub>, CH(COMe)CO<sub>2</sub>Et, CMe<sub>2</sub>CHO, 2-oxocyclopentyl, 2-oxocyclohexyl] in 35-77%



yield. Diazatricyclo compds. II (n = 2, 3; R1 = Me, Et; R2 = H, Me) were obtained in 45-70% yield by reaction of the quinoxalinium salt III, with the corresponding enamines, e.g., 1-morpholinocyclohexene or 1-pyrrolidinocyclohexene.

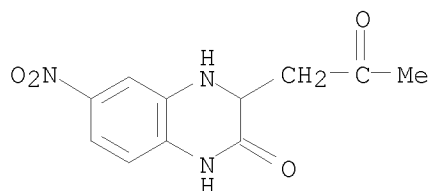
IT 75078-75-0P 75078-76-1P 75078-77-2P

75078-79-4P 75078-80-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and spectra of)

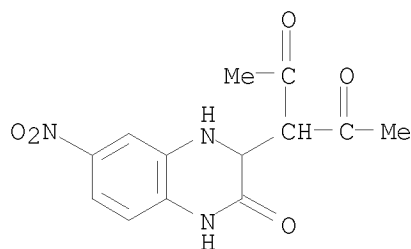
RN 75078-75-0 CAPLUS

CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-nitro-3-(2-oxopropyl)- (CA INDEX NAME)



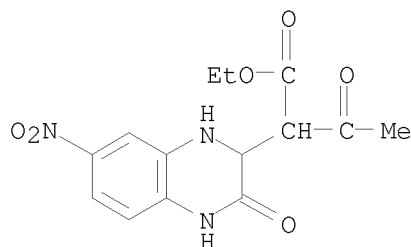
RN 75078-76-1 CAPLUS

CN 2,4-Pentanedione, 3-(1,2,3,4-tetrahydro-7-nitro-3-oxo-2-quinoxaliny)-  
(CA INDEX NAME)



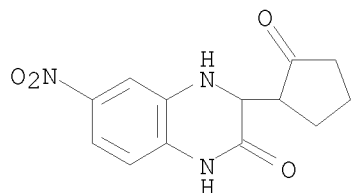
RN 75078-77-2 CAPLUS

CN 2-Quinoxalineacetic acid,  $\alpha$ -acetyl-1,2,3,4-tetrahydro-7-nitro-3-oxo-  
, ethyl ester (CA INDEX NAME)

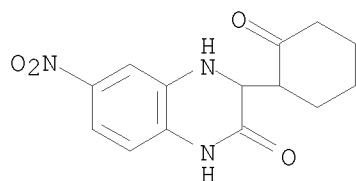


RN 75078-79-4 CAPLUS

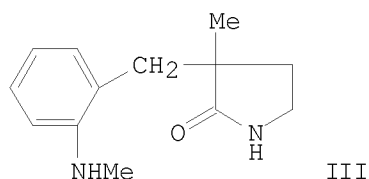
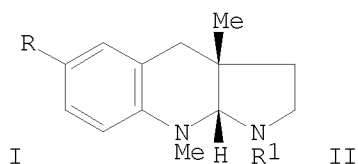
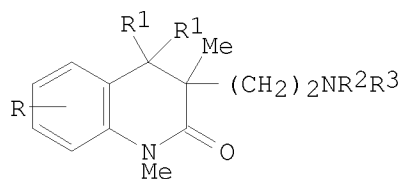
CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-nitro-3-(2-oxocyclopentyl)- (CA INDEX NAME)



RN 75078-80-7 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,4-dihydro-6-nitro-3-(2-oxocyclohexyl)- (CA INDEX NAME)



L32 ANSWER 68 OF 68 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:76342 CAPLUS  
 DOCUMENT NUMBER: 92:76342  
 ORIGINAL REFERENCE NO.: 92:12571a,12574a  
 TITLE: Synthetic studies on pyrroloquinolines. Part 5. Preparation of hydrogenated 3a-methylpyrrolo[2,3-b]quinolines  
 AUTHOR(S): Iwakuma, Takeo; Miyazaki, Michihiko; Mashimo, Kiyohiko; Tanaka, Tadasu; Aoe, Keiichi; Nagahashi, Masamitsu; Date, Tadamasa; Kotera, Keishi  
 CORPORATE SOURCE: Org. Chem. Res. Lab., Tanaba Seiyaku Co. Ltd., Saitama, Japan  
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1979), (9), 2162-6  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

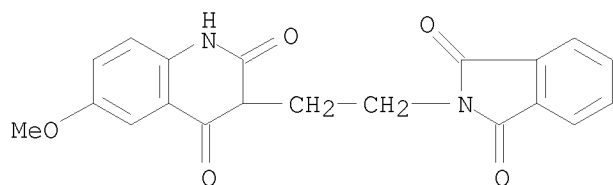


AB Reductive cyclization (Na-EtOH) of the quinolone I (R = R1 = R2 = R3 = H), derived from I (R = 7-Cl, R12 = O, R2R3 = phthaloyl) by sequential catalytic hydrogenation and dephthaloylation, gave 30% pyrroloquinoline II (R = R1 = H) and 26% pyrrolidone III. The stereochem. of the B-C ring junction of II (R = R1 = H) was determined by x-ray crystallog. anal. of II (R = OMe, R1 = H).HCl. Clarke-Eschweiler methylation of II (R = OMe, R1 = H) gave a low yield of II (R = OMe, R1 = Me); this compound was better prepared (40.1%) by reduction (Na-EtOH) of I (R = 6-OMe, R1 = H, R2 = Me, R3 = CO2Et), derived from I (R = 6-OMe, R1 = R2 = R3 = H) by sequential ethoxycarbonylation (NaOH-ClCO2Et) and methylation (MeI-DMF-NaH).

IT 72729-78-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and methylation of)

RN 72729-78-3 CAPLUS

CN 2,4(1H,3H)-Quinolinedione, 3-[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethyl]-6-methoxy- (CA INDEX NAME)



=> DHIS  
 DHIS IS NOT A RECOGNIZED COMMAND  
 The previous command name entered was not recognized by the system.  
 For a list of commands available to you in the current file, enter  
 "HELP COMMANDS" at an arrow prompt (=>).

=> D HIS

(FILE 'HOME' ENTERED AT 09:43:22 ON 08 MAY 2008)

FILE 'REGISTRY' ENTERED AT 09:43:41 ON 08 MAY 2008

L1 STRUCTURE UPLOADED  
 L2 50 S L1  
 L3 10264 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:44:37 ON 08 MAY 2008

L4 299 S L3

FILE 'REGISTRY' ENTERED AT 09:57:37 ON 08 MAY 2008

L5 STRUCTURE UPLOADED  
 L6 21 S L5  
 L7 11355 S L6 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:59:35 ON 08 MAY 2008

FILE 'REGISTRY' ENTERED AT 10:04:01 ON 08 MAY 2008

L8 STRUCTURE UPLOADED  
 L9 STRUCTURE UPLOADED  
 L10 0 S L8  
 L11 105 S L8 SSS FULL  
 L12 21 S L9  
 L13 10576 S L9 SSS FULL

L14               STRUCTURE UPLOADED  
L15           50 S L14  
L16               STRUCTURE UPLOADED  
L17           21 S L16  
L18       10559 S L16 SSS FULL  
L19               STRUCTURE UPLOADED  
L20           1 S L19  
L21       12 S L19 SSS FULL  
L22       10676 S L21 OR L18 OR L11

FILE 'CAPLUS' ENTERED AT 10:13:35 ON 08 MAY 2008

L23           551 S L22  
L24               STRUCTURE UPLOADED  
              S L24

FILE 'REGISTRY' ENTERED AT 10:21:28 ON 08 MAY 2008

L25           50 S L24

FILE 'CAPLUS' ENTERED AT 10:21:29 ON 08 MAY 2008

L26           2 S L25  
              S L24

FILE 'REGISTRY' ENTERED AT 10:21:41 ON 08 MAY 2008

L27           9835 S L24 SSS FULL

FILE 'CAPLUS' ENTERED AT 10:21:43 ON 08 MAY 2008

L28           231 S L27 SSS FULL  
              S L24 NOT L28

FILE 'REGISTRY' ENTERED AT 10:21:59 ON 08 MAY 2008

L29           50 S L24

FILE 'CAPLUS' ENTERED AT 10:22:00 ON 08 MAY 2008

L30           2 S L29  
L31           0 S L30 NOT L28  
L32           68 S L4 NOT L28  
L33           299 S L32 OR L28

=> D L28 1-5

L28 ANSWER 1 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:237568 CAPLUS  
DN 148:393737  
TI Docking Study Yields Four Novel Inhibitors of the Protooncogene Pim-1  
Kinase  
AU Pierce, Albert C.; Jacobs, Marc; Stuver-Moody, Cameron  
CS Vertex Pharmaceuticals, Incorporated, Cambridge, MA, 02139, USA  
SO Journal of Medicinal Chemistry (2008), 51(6), 1972-1975  
CODEN: JMCMAR; ISSN: 0022-2623  
PB American Chemical Society  
DT Journal  
LA English  
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 2 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:194147 CAPLUS  
DN 148:426840  
TI Discovery of potent pteridine reductase inhibitors to guide antiparasite  
drug development  
AU Cavazzuti, Antonio; Paglietti, Giuseppe; Hunter, William N.; Gamarro,  
Francisco; Piras, Sandra; Loriga, Mario; Alleca, Sergio; Corona, Paola;

McLuskey, Karen; Tulloch, Lindsay; Gibellini, Federica; Ferrari, Stefania;  
 Costi, Maria Paola  
 CS Dipartimento di Scienze Farmaceutiche, Universita di Modena e Reggio  
 Emilia, Modena, 41100, Italy  
 SO Proceedings of the National Academy of Sciences of the United States of  
 America (2008), 105(5), 1448-1453  
 CODEN: PNASA6; ISSN: 0027-8424  
 PB National Academy of Sciences  
 DT Journal  
 LA English  
 RE.CNT 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 3 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:1452342 CAPLUS  
 DN 148:158850  
 TI Comparative Molecular Field Analysis of quinoline derivatives as selective  
 and noncompetitive mGluR1 antagonists  
 AU Sekhar, Y. Nataraja; Nayana, M. Ravi Shashi; Ravikumar, Muttineni;  
 Mahmood, S. k.  
 CS Bioinformatics Division, Department of Environmental Microbiology, Osmania  
 University, Hyderabad, India  
 SO Chemical Biology & Drug Design (2007), 70(6), 511-519  
 CODEN: CBDDAL; ISSN: 1747-0277  
 PB Blackwell Publishing Ltd.  
 DT Journal  
 LA English  
 RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:1391133 CAPLUS  
 DN 148:191869  
 TI Microwave-assisted one-pot synthesis of some new furo[2,3-b]quinolines  
 using potassium carbonate under solvent-free conditions  
 AU Raghavendra, M.; Naik, Halehatty S. Bhojya; Sherigara, Bailure S.  
 CS Department of P G Studies and Research in Industrial Chemistry, School of  
 Chemical Sciences, Kuvempu University, Karnataka, India  
 SO Canadian Journal of Chemistry (2007), 85(12), 1041-1044  
 CODEN: CJCHAG; ISSN: 0008-4042  
 PB National Research Council of Canada  
 DT Journal  
 LA English  
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 5 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:1364437 CAPLUS  
 DN 148:33637  
 TI Substituted quinolones as ATP-utilizing enzyme inhibitors and their  
 preparation, compositions, and uses thereof  
 IN Dickson, John K.; Chen, Ke; Hodge, Carl Nicholas  
 PA Amphora Discovery Corporation, USA  
 SO PCT Int. Appl., 143pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2007136592	A2	20071129	WO 2007-US11484	20070510
	WO 2007136592	A3	20080228		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

US 20070287706 A1 20071213 US 2007-803140 20070510

PRAI US 2006-801881P P 20060518

OS MARPAT 148:33637

=> D L28 6-10

L28 ANSWER 6 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:1177863 CAPLUS

DN 147:469247

TI Preparation of quinolones derivatives useful as inducible nitric oxide synthase inhibitors

IN Roppe, Jeffrey R.; Bonnefous, Celine; Smith, Nicholas D.; Lindstrom, Andrew K.; Noble, Stewart A.; Hassig, Christian A.; Payne, Joseph E.; Zhuang, Hui; Chen, Xiaohong; Duron, Sergio G.

PA Kalypsys, Inc., USA

SO PCT Int. Appl., 238pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007117778	A2	20071018	WO 2007-US62769	20070223
	WO 2007117778	A3	20080207		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
PRAI	US 2006-776561P	P	20060224		
	US 2006-848696P	P	20061002		
OS	MARPAT 147:469247				

L28 ANSWER 7 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:1089909 CAPLUS

DN 147:406842

TI Preparation of 1,2-dihydroquinolin-2-one, 1,2-dihydroquinoxalin-2-one, and 1,2-dihydronaphthyridin-2-one derivatives for treating ocular hypertension

IN Doherty, James B.; Shu, Min; Shen, Dong-Ming; Zhang, Fengqi

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 92pp.

CODEN: PIXXD2

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2007108968	A2	20070927	WO 2007-US6109	20070309
	WO 2007108968	A3	20071129		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
PRAI	US 2006-781904P	P	20060313		
OS	MARPAT 147:406842				

L28 ANSWER 8 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:854383 CAPLUS  
DN 147:180202  
TI High-conductance calcium-activated potassium channels: validated targets for smooth muscle relaxants?  
AU Garcia, Maria L.; Shen, Dong-Ming; Kaczorowski, Gregory J.  
CS Department of Ion Channels, Merck Research Laboratories, Rahway, NJ, 07065, USA  
SO Expert Opinion on Therapeutic Patents (2007), 17(7), 831-842  
CODEN: EOTPEG; ISSN: 1354-3776  
PB Informa Healthcare  
DT Journal; General Review  
LA English  
RE.CNT 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 9 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:840337 CAPLUS  
DN 147:406712  
TI Synthesis of diastereomeric 2,4-disubstituted pyrano[2,3-b]quinolines from 3-formyl-2-quinolones through O-C bond formation via intramolecular electrophilic cyclization  
AU Singh, Mrityunjay K.; Chandra, Atish; Singh, Bhawana; Singh, Radhey M.  
CS Department of Chemistry, Banaras Hindu University, Varanasi, 221 005, India  
SO Tetrahedron Letters (2007), 48(34), 5987-5990  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Ltd.  
DT Journal  
LA English  
OS CASREACT 147:406712  
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 10 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:741976 CAPLUS  
DN 147:291397  
TI Nonnucleoside inhibitor of measles virus RNA-dependent RNA polymerase complex activity  
AU White, Laura K.; Yoon, Jeong-Joong; Lee, Jin K.; Sun, Aiming; Du, Yuhong;

Fu, Haian; Synder, James P.; Plemper, Richard K.  
 CS Department of Pediatrics, Emory University School of Medicine, Atlanta,  
 GA, 30322, USA  
 SO Antimicrobial Agents and Chemotherapy (2007), 51(7), 2293-2303  
 CODEN: AMACCQ; ISSN: 0066-4804  
 PB American Society for Microbiology  
 DT Journal  
 LA English  
 RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 11-15

L28 ANSWER 11 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:702537 CAPLUS  
 DN 147:110180  
 TI HDP (heme detoxification protein) involved in hemozoin formation in  
 Plasmodium and Theileria as an anti-protozoal target, and high-throughput  
 screening for antimalarial HDP inhibitors  
 IN Rathore, Dharmender; Jani, Dewal; Nagarkatti, Rana  
 PA USA  
 SO U.S. Pat. Appl. Publ., 123pp., Cont.-in-part of U.S. Ser. No. 249,355.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 20070148185	A1	20070628	US 2006-549482	20061013
	US 20070087012	A1	20070419	US 2005-249355	20051014
PRAI	US 2005-249355	A2	20051014		

L28 ANSWER 12 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:521015 CAPLUS  
 DN 147:30962  
 TI Preparation of 1,2-dihydroquinoline derivatives as inhibitors of  
 epithelial growth factor receptor for treatment of tumor  
 IN Luo, Xiaomin; Li, Jian; Jiang, Hualiang; Shen, Xu; Liu, Hong; Shen,  
 Jianhua; Zhu, Weiliang; Fu, Lili; Li, Lin; Mei, Changlin  
 PA Shanghai Institute of Materia Medica, Chinese Academy of Sciences, Peop.  
 Rep. China  
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 19pp.  
 CODEN: CNXXEV  
 DT Patent  
 LA Chinese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	CN 1958572	A	20070509	CN 2005-10110045	20051104
PRAI	CN 2005-10110045		20051104		
OS	CASREACT 147:30962; MARPAT 147:30962				

L28 ANSWER 13 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:427291 CAPLUS  
 DN 147:45189  
 TI High-throughput screening for small-molecule activators of neutrophils:  
 identification of novel N-formyl peptide receptor agonists  
 AU Schepetkin, Igor A.; Kirpotina, Liliya N.; Khlebnikov, Andrei I.; Quinn,  
 Mark T.  
 CS Department of Veterinary Molecular Biology, Montana State University,  
 Bozeman, MT, USA



SO Molecular Pharmacology (2007), 71(4), 1061-1074  
CODEN: MOPMA3; ISSN: 0026-895X  
PB American Society for Pharmacology and Experimental Therapeutics  
DT Journal  
LA English  
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 14 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:128762 CAPLUS  
DN 146:350581  
TI Structure-Based Pharmacophore Identification of New Chemical Scaffolds as  
Non-Nucleoside Reverse Transcriptase Inhibitors  
AU Barreca, Maria Letizia; De Luca, Laura; Iraci, Nunzio; Rao, Angela; Ferro,  
Stefania; Maga, Giovanni; Chimirri, Alba  
CS Dipartimento Farmaco-Chimico, Universita di Messina, Messina, 98168, Italy  
SO Journal of Chemical Information and Modeling (2007), 47(2), 557-562  
CODEN: JCISD8; ISSN: 1549-9596  
PB American Chemical Society  
DT Journal  
LA English  
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 15 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:126145 CAPLUS  
DN 146:379791  
TI Atropisomeric 3-( $\beta$ -hydroxyethyl)-4-arylquinolin-2-ones as Maxi-K  
Potassium Channel Openers  
AU Vrudhula, Vivekananda M.; Dasgupta, Bireswar; Qian-Cutrone, Jingfang;  
Kozlowski, Edward S.; Boissard, Christopher G.; Dworetzky, Steven I.; Wu,  
Dedong; Gao, Qi; Kimura, Roy; Gribkoff, Valentin K.; Starrett, John E.,  
Jr.  
CS Bristol-Myers Squibb Pharmaceutical Research Institute, Wallingford, CT,  
06492, USA  
SO Journal of Medicinal Chemistry (2007), 50(5), 1050-1057  
CODEN: JMCMAR; ISSN: 0022-2623  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 146:379791  
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 16-20

L28 ANSWER 16 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:61837 CAPLUS  
DN 146:156236  
TI Cellular cholesterol absorption modifiers, and their therapeutic use  
IN Gardiner, Elisabeth M.; Duron, Sergio G.; Massari, Mark E.; Severance,  
Daniel L.; Semple, Joseph E.  
PA Kalypsys, Inc., USA  
SO PCT Int. Appl., 300pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007008541	A2	20070118	WO 2006-US26242	20060705

WO 2007008541 A3 20070726

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,  
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,  
MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,  
SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG,  
US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRAI US 2005-697659P P 20050708  
US 2005-697686P P 20050708  
US 2005-697814P P 20050708  
US 2005-727646P P 20051017  
US 2006-782303P P 20060313

OS MARPAT 146:156236

L28 ANSWER 17 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:1338413 CAPLUS

DN 146:81779

TI Preparation of quinolinones and analogs for the treatment of multi-drug  
resistant bacterial infections

IN Breault, Gloria; Eyermann, Charles Joseph; Geng, Bolin; Morningstar,  
Marshall; Reck, Folkert

PA Astrazeneca AB, Swed.; Astrazeneca UK Limited

SO PCT Int. Appl., 209pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006134378	A1	20061221	WO 2006-GB2207	20060616
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	AU 2006258879	A1	20061221	AU 2006-258879	20060616
	CA 2610900	A1	20061221	CA 2006-2610900	20060616
	EP 1893599	A1	20080305	EP 2006-744233	20060616
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	IN 2007DN09254	A	20080118	IN 2007-DN9254	20071130
	KR 2008021031	A	20080306	KR 2007-729378	20071214
	NO 2008000338	A	20080229	NO 2008-338	20080116
PRAI	US 2005-691340P	P	20050616		
	WO 2006-GB2207	W	20060616		

OS MARPAT 146:81779

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 18 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1322867 CAPLUS  
 DN 146:229152  
 TI Trifluoroacetic acid: a more effective and efficient reagent for the  
 synthesis of 3-arylmethylene-3,4-dihydro-1H-quinolin-2-ones and  
 3-arylmethyl-2-aminoquinolines from Baylis-Hillman derivatives via Claisen  
 rearrangement  
 AU Pathak, Richa; Madapa, Sudharshan; Batra, Sanjay  
 CS Medicinal and Process Chemistry Division, Central Drug Research Institute,  
 Uttar Pradesh, 226001, India  
 SO Tetrahedron (2006), Volume Date 2007, 63(2), 451-460  
 CODEN: TETRAB; ISSN: 0040-4020  
 PB Elsevier Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 146:229152  
 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 19 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1119240 CAPLUS  
 DN 147:235239  
 TI New syntheses of selenolo(2,3-b)quinoline-2-carboxylic ethyl esters  
 AU Nithyadevi, V.; Rajendran, S. P.  
 CS Department of Chemistry, Bharathiar University, India  
 SO Phosphorus, Sulfur and Silicon and the Related Elements (2006), 181(11),  
 2623-2634  
 CODEN: PSSLEC; ISSN: 1042-6507  
 PB Taylor & Francis, Inc.  
 DT Journal  
 LA English  
 RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 20 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1041251 CAPLUS  
 DN 145:369901  
 TI Protein aggregation inhibitors and protein aggregate depolymerizing  
 compounds for the treatment of neurodegenerative conditions  
 IN Mandelkow, Eckhard; Mandelkow, Eva-Maria; Biernat, Jacek; Bergen, Martin  
 Von; Pickhardt, Marcus  
 PA Max-Planck-Gesellschaft Zur Forderung der Wissenschaften, e.v., Germany  
 SO U.S. Pat. Appl. Publ., 71pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060223812	A1	20061005	US 2006-351884	20060210
	WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
	W:				
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	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				
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	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				
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	RW:				
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	CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS,				
	MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD,				

RU, TJ, TM  
 PRAI WO 2004-EP8031 A2 20040717  
 US 2005-652284P P 20050211  
 OS MARPAT 145:369901

=> D L28 20 IBIB ABS HITSTR

L28 ANSWER 20 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1041251 CAPLUS

DOCUMENT NUMBER: 145:369901

TITLE: Protein aggregation inhibitors and protein aggregate depolymerizing compounds for the treatment of neurodegenerative conditions

INVENTOR(S): Mandelkow, Eckhard; Mandelkow, Eva-Maria; Biernat, Jacek; Bergen, Martin Von; Pickhardt, Marcus

PATENT ASSIGNEE(S): Max-Planck-Gesellschaft Zur Forderung der Wissenschaften, e.v., Germany

SOURCE: U.S. Pat. Appl. Publ., 71pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060223812	A1	20061005	US 2006-351884	20060210
WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: WO 2004-EP8031 A2 20040717  
 US 2005-652284P P 20050211

OTHER SOURCE(S): MARPAT 145:369901

AB The invention discloses the use of compds. capable of inhibiting protein aggregate formation and capable of depolymerizing protein aggregates for the preparation of a pharmaceutical composition for treating neurodegenerative conditions, e.g. Alzheimer's disease.

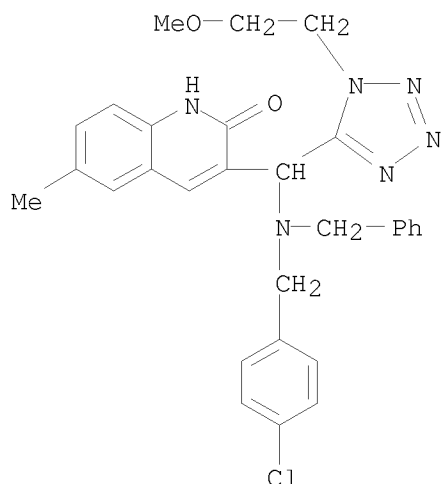
IT 523984-58-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(protein aggregation inhibitors and protein aggregate depolymerizing compounds for treatment of neurodegenerative conditions)

RN 523984-58-9 CAPLUS

CN 2(1H)-Quinolinone, 3-[[[(4-chlorophenyl)methyl](phenylmethyl)amino][1-(2-methoxyethyl)-1H-tetrazol-5-yl]methyl]-6-methyl- (CA INDEX NAME)



=> D 24 21-25

L33 ANSWER 24 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1041251 CAPLUS  
 DN 145:369901  
 TI Protein aggregation inhibitors and protein aggregate depolymerizing  
 compounds for the treatment of neurodegenerative conditions  
 IN Mandelkow, Eckhard; Mandelkow, Eva-Maria; Biernat, Jacek; Bergen, Martin  
 Von; Pickhardt, Marcus  
 PA Max-Planck-Gesellschaft Zur Forderungder Wissenschaften, e.v., Germany  
 SO U.S. Pat. Appl. Publ., 71pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060223812	A1	20061005	US 2006-351884	20060210
	WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
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	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				
	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				
	TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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	IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,				
	CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS,				
	MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD,				
	RU, TJ, TM				
PRAI	WO 2004-EP8031	A2	20040717		
	US 2005-652284P	P	20050211		
OS	MARPAT 145:369901				

L33 ANSWER 21 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1338413 CAPLUS  
 DN 146:81779  
 TI Preparation of quinolinones and analogs for the treatment of multi-drug  
 resistant bacterial infections  
 IN Breault, Gloria; Eyermann, Charles Joseph; Geng, Bolin; Morningstar,

Marshall; Reck, Folkert  
 PA Astrazeneca AB, Swed.; Astrazeneca UK Limited  
 SO PCT Int. Appl., 209pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006134378	A1	20061221	WO 2006-GB2207	20060616
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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	AU 2006258879	A1	20061221	AU 2006-258879	20060616
	CA 2610900	A1	20061221	CA 2006-2610900	20060616
	EP 1893599	A1	20080305	EP 2006-744233	20060616
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	IN 2007DN09254	A	20080118	IN 2007-DN9254	20071130
	KR 2008021031	A	20080306	KR 2007-729378	20071214
	NO 2008000338	A	20080229	NO 2008-338	20080116
PRAI	US 2005-691340P	P	20050616		
	WO 2006-GB2207	W	20060616		

OS MARPAT 146:81779

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 22 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1322867 CAPLUS  
 DN 146:229152  
 TI Trifluoroacetic acid: a more effective and efficient reagent for the synthesis of 3-arylmethylene-3,4-dihydro-1H-quinolin-2-ones and 3-arylmethyl-2-aminoquinolines from Baylis-Hillman derivatives via Claisen rearrangement  
 AU Pathak, Richa; Madapa, Sudharshan; Batra, Sanjay  
 CS Medicinal and Process Chemistry Division, Central Drug Research Institute, Uttar Pradesh, 226001, India  
 SO Tetrahedron (2006), Volume Date 2007, 63(2), 451-460  
 CODEN: TETRAB; ISSN: 0040-4020  
 PB Elsevier Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 146:229152

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 23 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1119240 CAPLUS  
 DN 147:235239  
 TI New syntheses of selenolo(2,3-b)quinoline-2-carboxylic ethyl esters  
 AU Nithyadevi, V.; Rajendran, S. P.  
 CS Department of Chemistry, Bharathiar University, India

SO Phosphorus, Sulfur and Silicon and the Related Elements (2006), 181(11),  
2623-2634  
CODEN: PSSLEC; ISSN: 1042-6507  
PB Taylor & Francis, Inc.  
DT Journal  
LA English  
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 24 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:1041251 CAPLUS  
DN 145:369901  
TI Protein aggregation inhibitors and protein aggregate depolymerizing  
compounds for the treatment of neurodegenerative conditions  
IN Mandelkow, Eckhard; Mandelkow, Eva-Maria; Biernat, Jacek; Bergen, Martin  
Von; Pickhardt, Marcus  
PA Max-Planck-Gesellschaft Zur Forderungder Wissenschaften, e.v., Germany  
SO U.S. Pat. Appl. Publ., 71pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060223812	A1	20061005	US 2006-351884	20060210
	WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
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	TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				
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	RU, TJ, TM				
PRAI	WO 2004-EP8031	A2	20040717		
	US 2005-652284P	P	20050211		
OS	MARPAT 145:369901				

L33 ANSWER 25 OF 299 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:1010580 CAPLUS  
DN 145:377217  
TI Method for the preparation of phenyl-3-aminomethylquinol-2-one derivatives  
of as inhibitors of NO-synthase, their biological activity and  
pharmaceutical composition based thereon  
IN Kirpichenok, M. A.; Genis, D. V.; Rodin, O. G.; Solov'ev, A. N.; Kochubei,  
V. S.; Fedotov, Y. A.; Afanas'ev, I. I.  
PA 000 "Asinehks Medkhim", Russia  
SO Russ., 34pp.  
CODEN: RUXXE7  
DT Patent  
LA Russian  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	RU 2284325	C2	20060927	RU 2003-136378	20031217
PRAI	RU 2003-136378		20031217		
OS	CASREACT 145:377217; MARPAT 145:377217				

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SIM ----- Structure IMAge.
SAT ----- Structure ATtributes and map table if it contains data.
SCT ----- Structure Connection Table and map table if it contains
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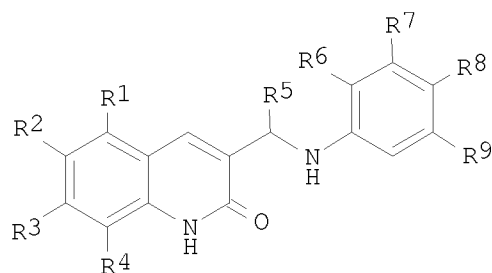
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SIM ----- Structure IMAge.
SAT ----- Structure ATtributes and map table if it contains data.
SCT ----- Structure Connection Table and map table if it contains
              data.
SDA ----- All Structure DAta (image, attributes, connection table and
              map table if it contains data).
NOS ----- NO Structure data.
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L28  ANSWER 21 OF 231  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:      2006:1010580  CAPLUS
DOCUMENT NUMBER:       145:377217
TITLE:                 Method for the preparation of phenyl-3-
                        aminomethylquinol-2-one derivatives of as inhibitors
                        of NO-synthase, their biologically activity and
                        pharmaceutical composition based thereon
INVENTOR(S):           Kirpichenok, M. A.; Genis, D. V.; Rodin, O. G.;
                        Solov'ev, A. N.; Kochubei, V. S.; Fedotov, Y. A.;
                        Afanas'ev, I. I.
PATENT ASSIGNEE(S):    OOO "Asinehks Medkhim", Russia
SOURCE:                Russ., 34pp.
                        CODEN: RUXXE7
DOCUMENT TYPE:         Patent
LANGUAGE:              Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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RU 2284325	C2	20060927	RU 2003-136378	20031217
PRIORITY APPLN. INFO.:			RU 2003-136378	20031217
OTHER SOURCE(S):	CASREACT 145:377217; MARPAT 145:377217			
GI				





AB Invention relates to novel amino- and hydroxy-derivs. of phenyl-3-aminomethylquinol-2-ones I [R1 = H, Alkyl, OAlkyl; R2 = H, Alk, OAlk, -OCF3; R3 = H, Alk, OAlk, -SCH3; R4 = H, Alk, OAlk; R2R3 = -(CH2)3, -OCH2O-, -OCH2CH2O-; R5 = H, Alk; R6, R7, R9 = H; R8 = dialkylamino, pyrrolidinyl, piperidinyl (optionally alkyl, hydroxy substituted), azepinyl, morpholinyl, 4-alkylpiperazinyl, 4-acylpiperazinyl, 4-(furancarbonyl)piperazinyl, 4-benzylpiperazinyl, 4-phenylpiperazinyl, RO2C-substituted piperidinyl, 4-(R1R2NCO)-substituted piperidinyl, isoquinolin-2-yl; R = H, alkyl; in case of hydroxy-derivs. at least one among R6, R7, R8, R9 = OH and others = H]. Also, invention relates to methods for synthesis of these compds. and to a pharmaceutical composition based on these compds. inhibiting activity of NO-synthase. Thus, 3-[(4-(dimethylamino)phenylamino)methyl]-5,6,7-trimethoxy-1H-quinolin-2-one [I; R1 = R2 = R3 = OMe, R4 = R5 = R6 = R7 = R9 = H, R8 = NMe2 (II)] was prepared from -5,6,7-trimethoxy-2-oxo-1,2-dihydroquinoline-3-carboxaldehyde via reductive amination with 4-(Me2N)C6H4NH2 in ClCH2CH2Cl containing NaBH(OAc)3. Invention provides preparing novel compds. and pharmaceutical compns. based on thereof in aims for treatment of diseases associated with hyperactivity of phagocytizing cells, for example, rheumatic arthritis, asthma and others. The bioactivity of II was determined [IC50 = 0.031  $\mu$ M vs. NO synthase].

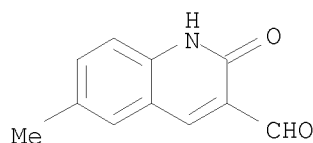
IT 101382-53-0P, 6-Methyl-2-oxo-1,2-dihydroquinoline-3-carboxaldehyde  
123990-78-3P 338428-47-0P 433975-12-3P,  
6-Ethoxy-2-oxo-1,2-dihydroquinoline-3-carboxaldehyde 873300-64-2P  
911105-80-1P 911105-82-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reductive amination of, by aniline derivs.; preparation of 3-[(phenylamino)methyl]quinol-2-one derivs. of as inhibitors of NO-synthase)

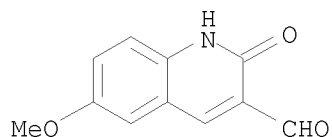
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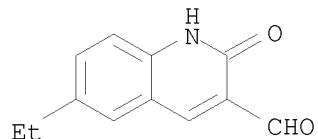


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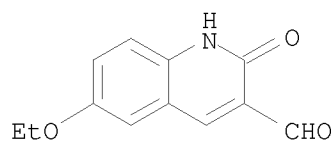
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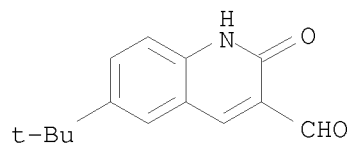
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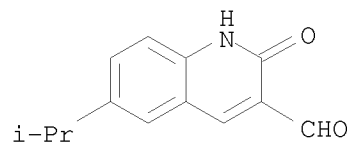
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 CN 3-Quinolinecarboxaldehyde, 6-ethoxy-1,2-dihydro-2-oxo- (CA INDEX NAME)



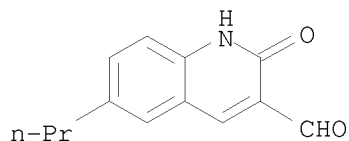
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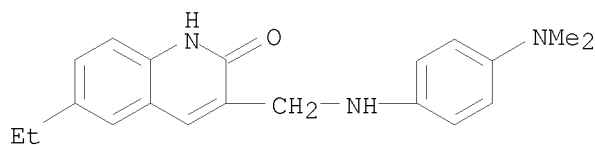
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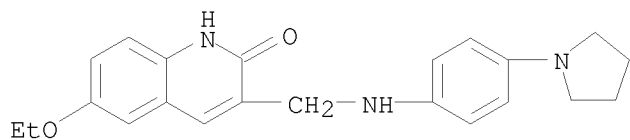
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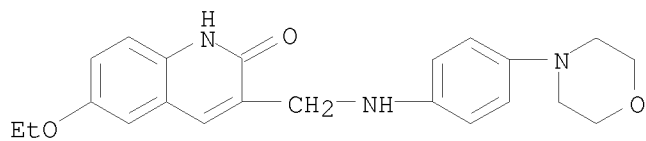
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 911106-11-1P 911106-12-2P 911106-20-2P  
 911106-24-6P 911106-35-9P 911106-36-0P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (preparation of 3-[(phenylamino)methyl]quinol-2-one derivs. of as inhibitors  
 of NO-synthase)  
 RN 911105-89-0 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[[[4-(dimethylamino)phenyl]amino]methyl]-6-ethyl-  
 (CA INDEX NAME)



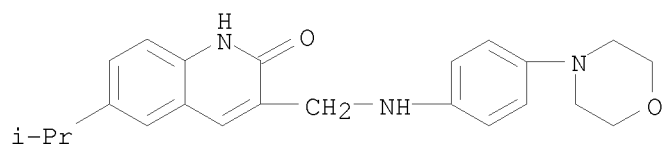
RN 911105-90-3 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-3-[[[4-(1-pyrrolidinyl)phenyl]amino]methyl]-  
 (CA INDEX NAME)



RN 911105-94-7 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-3-[[[4-(4-morpholinyl)phenyl]amino]methyl]-  
 (CA INDEX NAME)

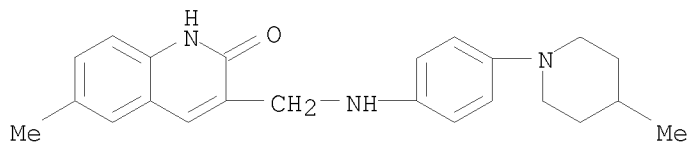


RN 911105-95-8 CAPLUS  
 CN 2(1H)-Quinolinone, 6-(1-methylethyl)-3-[[[4-(4-morpholinyl)phenyl]amino]methyl]-  
 (CA INDEX NAME)



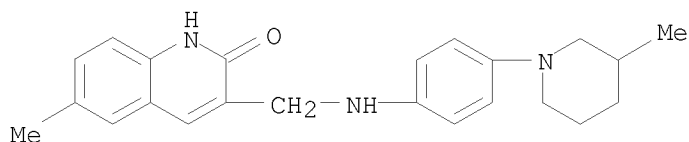
RN 911105-97-0 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-[[[4-(4-methyl-1-piperidiny)phenyl]amino]methyl]- (CA INDEX NAME)



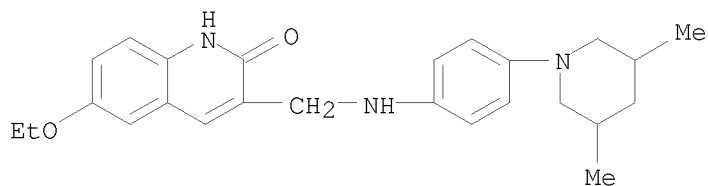
RN 911106-00-8 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-[[[4-(3-methyl-1-piperidiny)phenyl]amino]methyl]- (CA INDEX NAME)



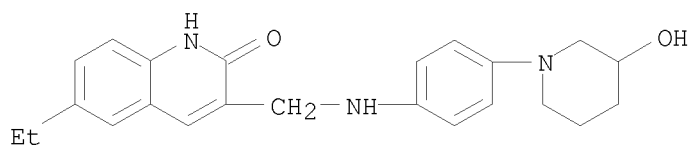
RN 911106-02-0 CAPLUS

CN 2(1H)-Quinolinone, 3-[[[4-(3,5-dimethyl-1-piperidiny)phenyl]amino]methyl]-6-ethoxy- (CA INDEX NAME)



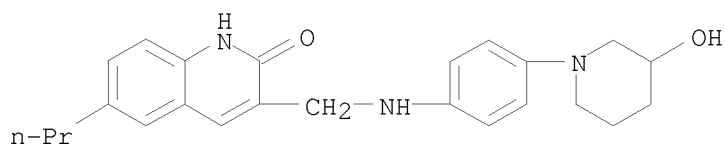
RN 911106-09-7 CAPLUS

CN 2(1H)-Quinolinone, 6-ethyl-3-[[[4-(3-hydroxy-1-piperidiny)phenyl]amino]methyl]- (CA INDEX NAME)



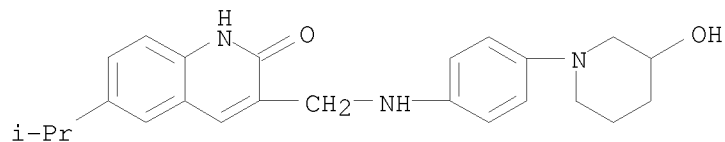
RN 911106-10-0 CAPLUS

CN 2(1H)-Quinolinone, 3-[[[4-(3-hydroxy-1-piperidiny)phenyl]amino]methyl]-6-propyl- (CA INDEX NAME)



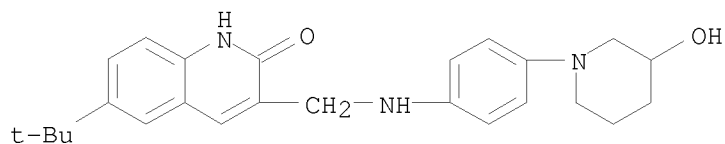
RN 911106-11-1 CAPLUS

CN 2(1H)-Quinolinone, 3-[[[4-(3-hydroxy-1-piperidiny)phenyl]amino]methyl]-6-(1-methylethyl)- (CA INDEX NAME)



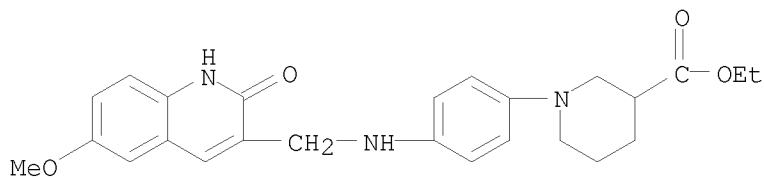
RN 911106-12-2 CAPLUS

CN 2(1H)-Quinolinone, 6-(1,1-dimethylethyl)-3-[[[4-(3-hydroxy-1-piperidiny)phenyl]amino]methyl]- (CA INDEX NAME)



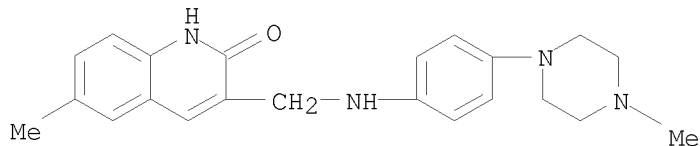
RN 911106-20-2 CAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)methyl]amino]phenyl]-, ethyl ester (CA INDEX NAME)



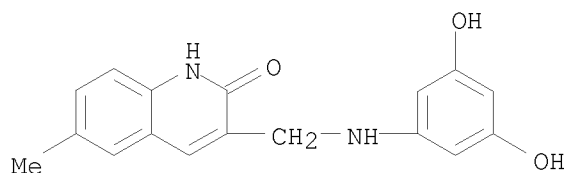
RN 911106-24-6 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-[[[4-(4-methyl-1-piperazinyl)phenyl]amino]methyl]- (CA INDEX NAME)

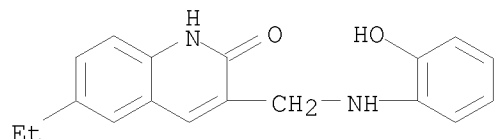


RN 911106-35-9 CAPLUS

CN 2(1H)-Quinolinone, 3-[[[4-(3,5-dihydroxyphenyl)amino]methyl]-6-methyl- (CA INDEX NAME)



RN 911106-36-0 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethyl-3-[[2-hydroxyphenyl]amino]methyl- (CA INDEX NAME)

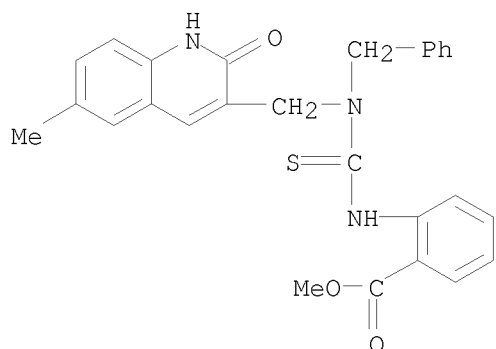


L28 ANSWER 22 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:992284 CAPLUS  
 DOCUMENT NUMBER: 146:194  
 TITLE: Design, synthesis and antitumor evaluation of a new series of N-substituted-thiourea derivatives  
 AUTHOR(S): Li, Jian; Tan, Jin-zhi; Chen, Li-li; Zhang, Jian; Shen, Xu; Mei, Chang-lin; Fu, Li-li; Lin, Li-ping; Ding, Jian; Xiong, Bing; Xiong, Xi-shan; Liu, Hong; Luo, Xiao-min; Jiang, Hua-liang  
 CORPORATE SOURCE: Drug Discovery and Design Centre, State Key Laboratory of Drug Research, Shanghai Institute of Materia Medica, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, 201203, Peop. Rep. China  
 SOURCE: Acta Pharmacologica Sinica (2006), 27(9), 1259-1271  
 CODEN: APSCG5; ISSN: 1671-4083  
 PUBLISHER: Blackwell Publishing Asia Pty Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 146:194  
 AB The aim was to design and synthesize a novel class of protein tyrosine kinase inhibitors, featuring the N-(2-oxo-1,2-dihydroquinolin-3-yl-methyl)-thiourea framework. Methods: First, 2 compds. were identified using the virtual screening approach in conjunction with binding assay based on surface plasmon resonance. Subsequently, 3 regions of the 2 compds. were selected for chemical modification. All compds. were characterized with potent inhibitory activities toward the human lung adenocarcinoma cell line SPAC1. Six compds. were found to show promising inhibitory activity against the SPAC1 tumor cell line.  
 IT 460339-74-6P 460339-75-7P 483332-87-2P  
 483332-88-3P 483332-89-4P 484054-99-1P  
 486412-74-2P 486437-38-1P 914774-13-3P  
 914774-16-6P 914774-18-8P 914774-19-9P  
 914774-21-3P 914774-23-5P 914774-24-6P  
 914774-25-7P 914774-27-9P 914774-29-1P  
 914774-31-5P 914774-33-7P 914774-34-8P  
 914774-35-9P 914774-36-0P 914774-37-1P  
 914774-38-2P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(N-substituted-thiourea derivs. as antitumor protein tyrosine kinase inhibitors)

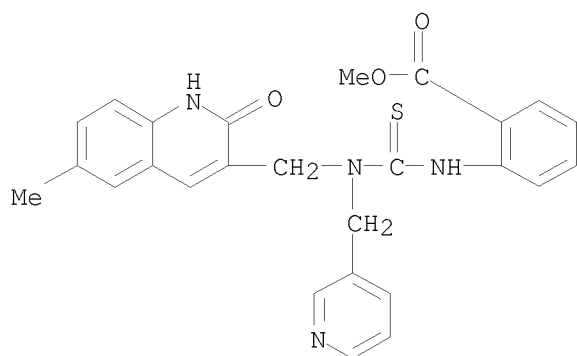
RN 460339-74-6 CAPLUS

CN Benzoic acid, 2-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl](phenylmethyl)amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)



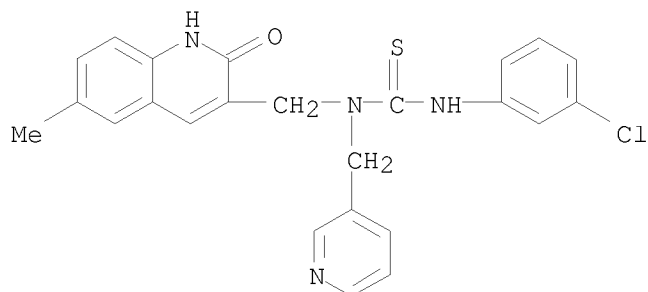
RN 460339-75-7 CAPLUS

CN Benzoic acid, 2-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl](3-pyridinylmethyl)amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)



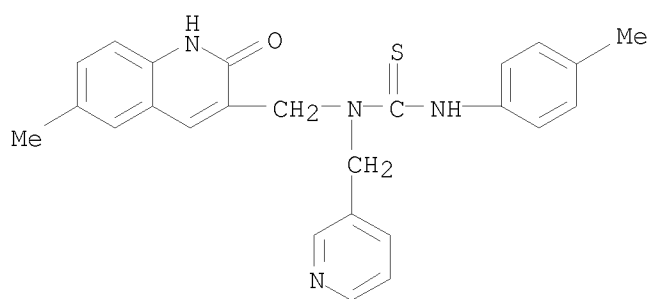
RN 483332-87-2 CAPLUS

CN Thiourea, N'-(3-chlorophenyl)-N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N-(3-pyridinylmethyl)- (CA INDEX NAME)

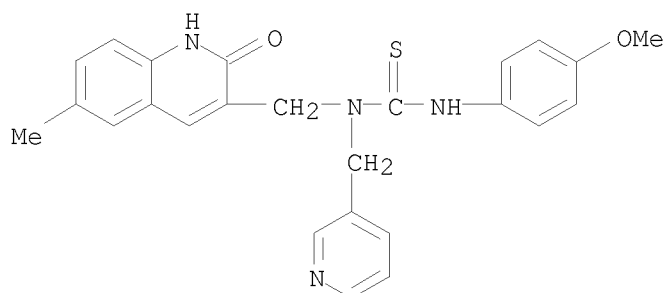


RN 483332-88-3 CAPLUS

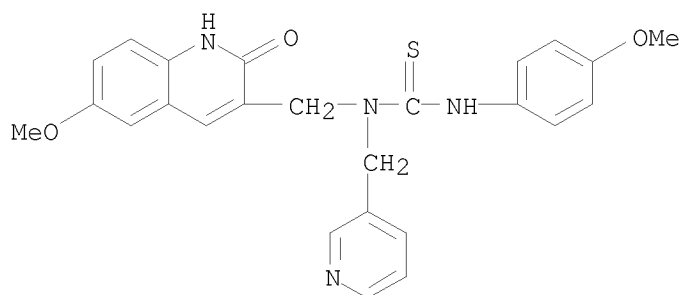
CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-(4-methylphenyl)-N-(3-pyridinylmethyl)- (CA INDEX NAME)



RN 483332-89-4 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-(4-methoxyphenyl)-N-(3-pyridinylmethyl)- (CA INDEX NAME)

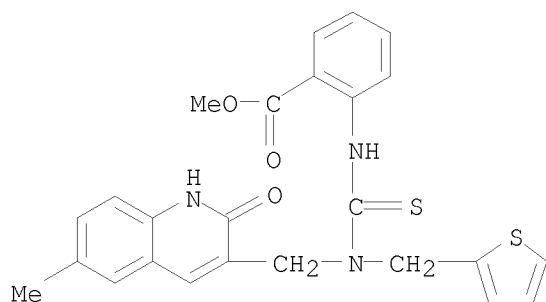


RN 484054-99-1 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)methyl]-N'-(4-methoxyphenyl)-N-(3-pyridinylmethyl)- (CA INDEX NAME)



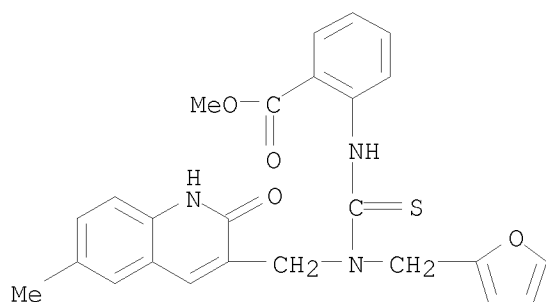
RN 486412-74-2 CAPLUS  
 CN Benzoic acid, 2-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl](2-thienylmethyl)amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)





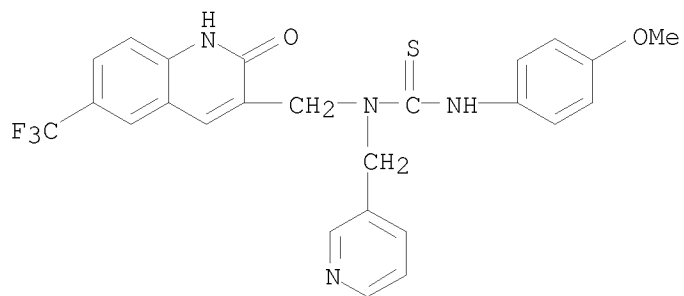
RN 486437-38-1 CAPLUS

CN Benzoic acid, 2-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl](2-furanylmethyl)amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)



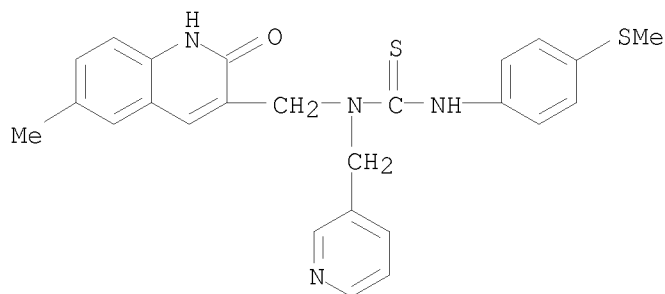
RN 914774-13-3 CAPLUS

CN Thiourea, N-[[[1,2-dihydro-2-oxo-6-(trifluoromethyl)-3-quinolinyl]methyl]-N'-(4-methoxyphenyl)-N-(3-pyridinylmethyl)- (CA INDEX NAME)

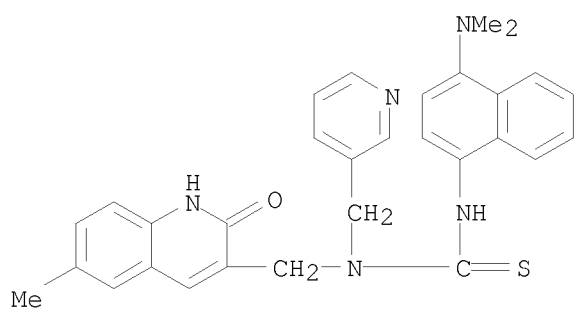


RN 914774-16-6 CAPLUS

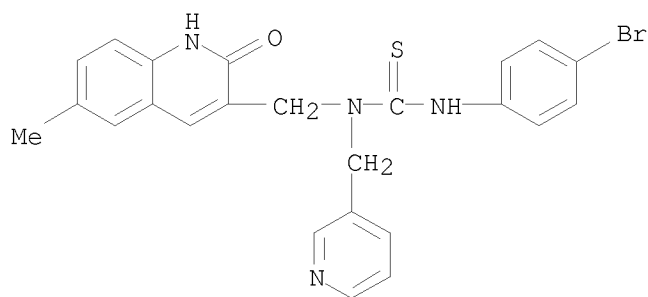
CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-(4-methylthio)phenyl]-N-(3-pyridinylmethyl)- (CA INDEX NAME)



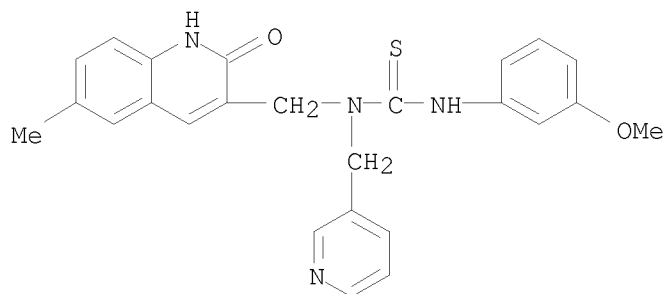
RN 914774-18-8 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-[4-(dimethylamino)-1-naphthalenyl]-N-(3-pyridinylmethyl)- (CA INDEX NAME)



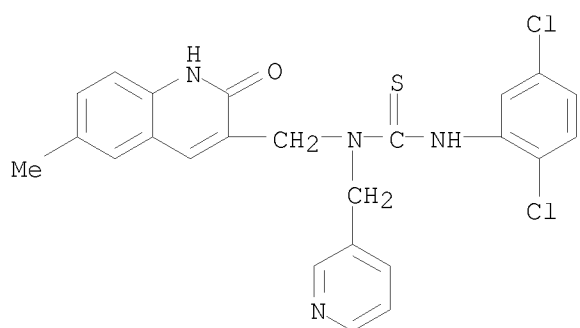
RN 914774-19-9 CAPLUS  
 CN Thiourea, N'-[(4-bromophenyl)-N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N-(3-pyridinylmethyl)]- (CA INDEX NAME)



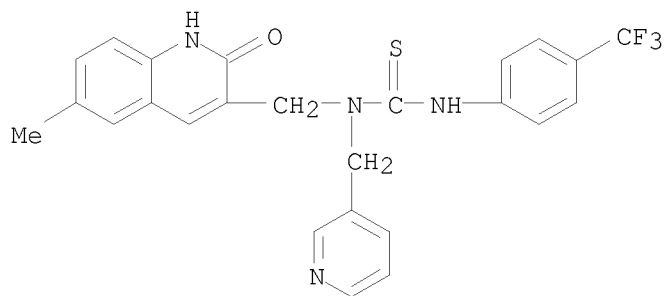
RN 914774-21-3 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-[(3-methoxyphenyl)-N-(3-pyridinylmethyl)]- (CA INDEX NAME)



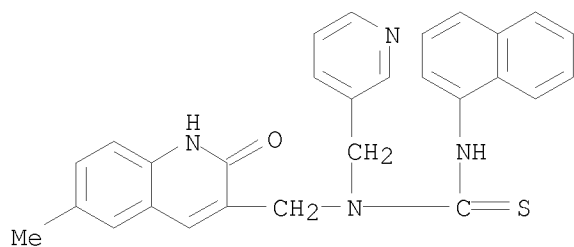
RN 914774-23-5 CAPLUS  
 CN Thiourea, N'-(2,5-dichlorophenyl)-N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N-(3-pyridinylmethyl)- (CA INDEX NAME)



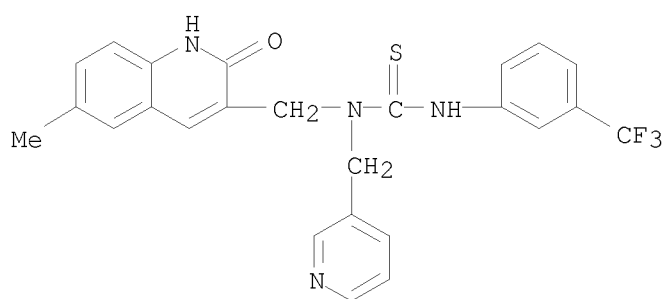
RN 914774-24-6 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N-(3-pyridinylmethyl)-N'-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



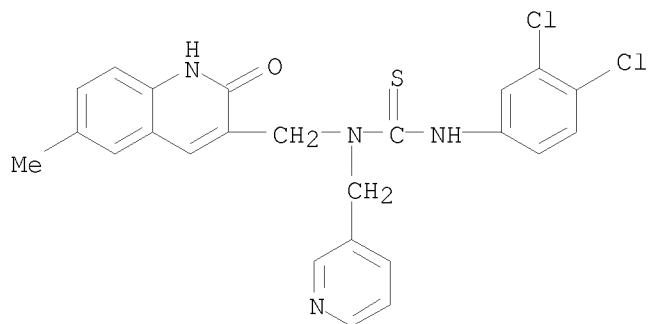
RN 914774-25-7 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-1-naphthalenyl-N-(3-pyridinylmethyl)- (CA INDEX NAME)



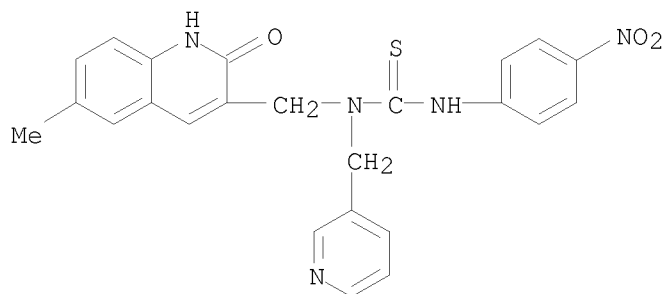
RN 914774-27-9 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N-(3-pyridinylmethyl)-N'-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



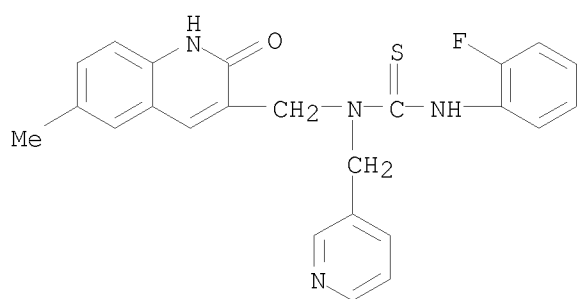
RN 914774-29-1 CAPLUS  
 CN Thiourea, N'-[(3,4-dichlorophenyl)]-N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N-(3-pyridinylmethyl)- (CA INDEX NAME)



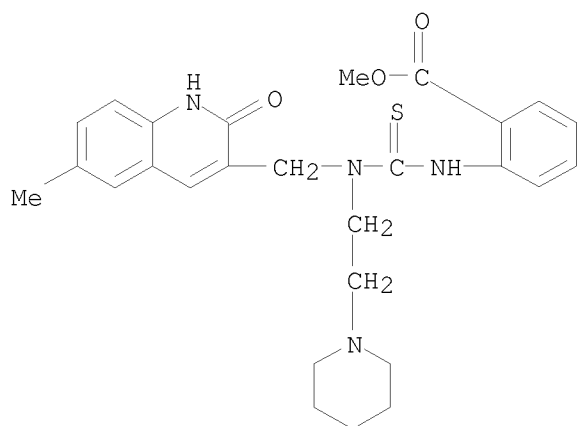
RN 914774-31-5 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-[(4-nitrophenyl)]-N-(3-pyridinylmethyl)- (CA INDEX NAME)



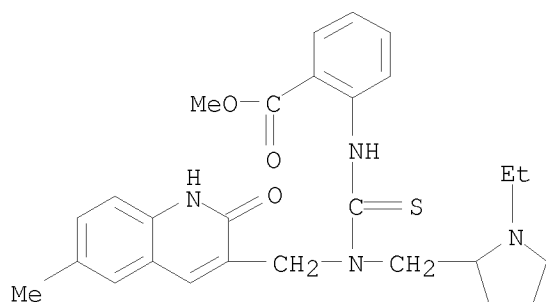
RN 914774-33-7 CAPLUS  
 CN Thiourea, N-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]-N'-(2-fluorophenyl)-N-(3-pyridinylmethyl)- (CA INDEX NAME)



RN 914774-34-8 CAPLUS  
 CN Benzoic acid, 2-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl][2-(1-piperidinyl)ethyl]amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)

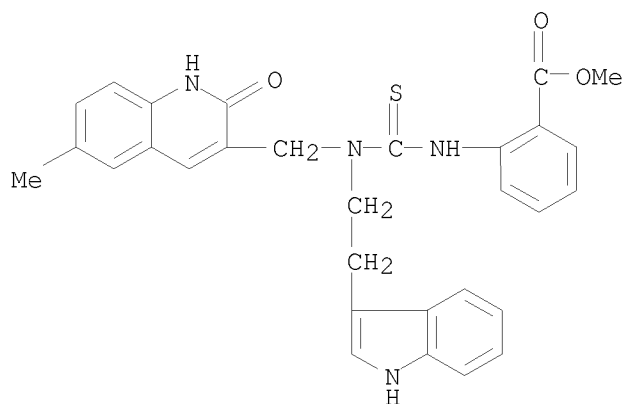


RN 914774-35-9 CAPLUS  
 CN Benzoic acid, 2-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl][(1-ethyl-2-pyrrolidinyl)methyl]amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)



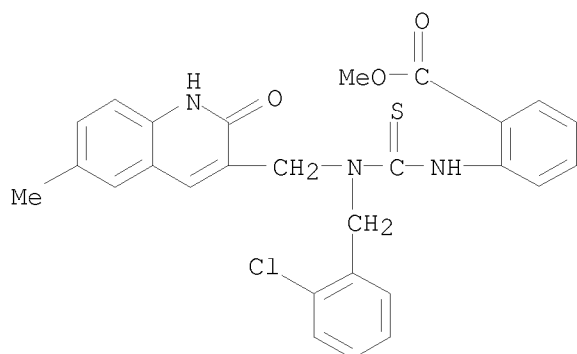
RN 914774-36-0 CAPLUS

CN Benzoic acid, 2-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl][2-(1H-indol-3-yl)ethyl]amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)



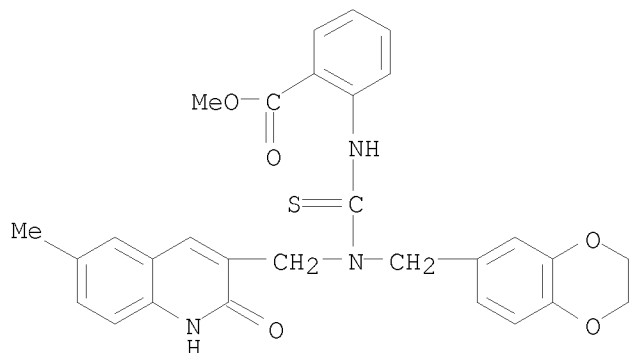
RN 914774-37-1 CAPLUS

CN Benzoic acid, 2-[[[(2-chlorophenyl)methyl][(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)



RN 914774-38-2 CAPLUS

CN Benzoic acid, 2-[[[(2,3-dihydro-1,4-benzodioxin-6-yl)methyl][(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methyl]amino]thioxomethyl]amino]-, methyl ester (CA INDEX NAME)



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 23 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:830334 CAPLUS

DOCUMENT NUMBER: 145:327681

TITLE: Pharmacophore-based virtual screening: The discovery of novel methionyl-tRNA synthetase inhibitors

AUTHOR(S): Kim, Su Yeon; Lee, Yeon-Sook; Kang, Taehee; Kim, Sunghoon; Lee, Jeewoo

CORPORATE SOURCE: Laboratory of Medicinal Chemistry, Research Institute of Pharmaceutical Sciences, College of Pharmacy, Seoul National University, Seoul, 151-742, S. Korea

SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(18), 4898-4907

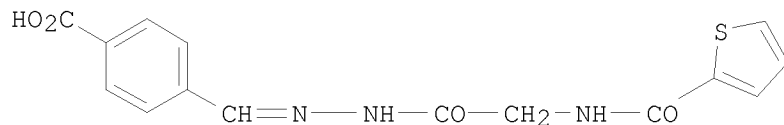
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I

AB We have performed virtual screening of a chemical database of 508,143 com. available chems. to search for new methionyl-tRNA synthetase (MetRS) inhibitors. In this study, potent lead compds. with a novel skeleton, including compound 27 (I) with IC<sub>50</sub> = 237 nM, were successfully identified as Escherichia coli MetRS inhibitors.

IT 362493-95-6

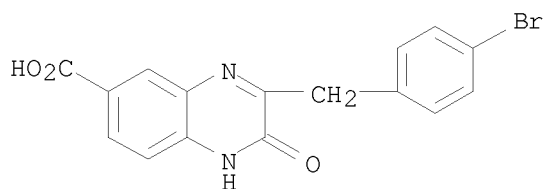
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methionyl-tRNA synthetase inhibitors from pharmacophore-based virtual screening)

RN 362493-95-6 CAPLUS

CN 6-Quinoxalinecarboxylic acid, 3-[(4-bromophenyl)methyl]-1,2-dihydro-2-oxo-

(CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 24 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:800127 CAPLUS

DOCUMENT NUMBER: 145:305641

TITLE: CoMFA study on quinolones as novel inhibitors of HIV-1 reverse transcriptase

AUTHOR(S): Yi, Ping; Qiu, Minghua

CORPORATE SOURCE: Laboratory of Phytochemistry, Kunming Institute of Botany, The Chinese Academy of Science, Kunming, 650204, Peop. Rep. China

SOURCE: Jisuanji Yu Yingyong Huaxue (2006), 23(5), 399-402  
CODEN: JYYHE6; ISSN: 1001-4160

PUBLISHER: Jisuanji Yu Yingyong Huaxue Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB The aim is to establish the CoMFA models of the quinolones and give the theor. basis to guide the design of the new drug. The advanced 3D-QSAR method CoMFA (comparative mol. field anal.) was used to study the quinolones and led to one CoMFA models of these data. The Crossvalidated coefficient  $q^2$  of the model reached 0.556, the non-crossvalidated coefficient  $r^2$  was up to 0.998, standard deviation was 0.044,  $F$

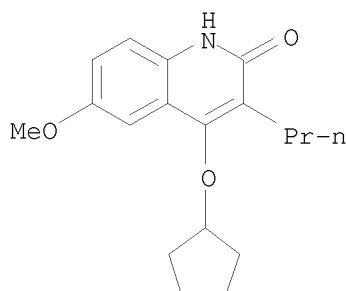
= 401.038. In the series of Quinolones the CoMFA models reveal the relationship between bioactivity and structure, they are helpful to the next design work to find new drugs with high bioactivity.

IT 345912-97-2 345912-98-3 345912-99-4

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(CoMFA study on quinolones as novel inhibitors of HIV-1 reverse transcriptase)

RN 345912-97-2 CAPLUS

CN 2(1H)-Quinolinone, 4-(cyclopentyloxy)-6-methoxy-3-propyl- (CA INDEX NAME)

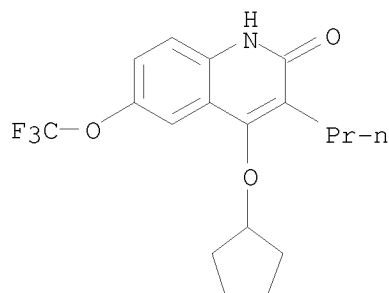


RN 345912-98-3 CAPLUS

CN 2(1H)-Quinolinone, 4-(cyclopentyloxy)-3-propyl-6-(trifluoromethoxy)- (CA

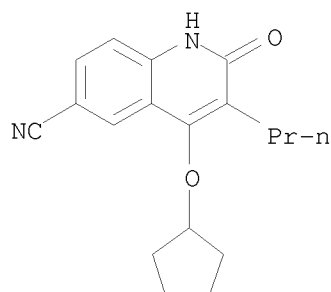


INDEX NAME)



RN 345912-99-4 CAPLUS

CN 6-Quinolinecarbonitrile, 4-(cyclopentyloxy)-1,2-dihydro-2-oxo-3-propyl-  
(CA INDEX NAME)



L28 ANSWER 25 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:791062 CAPLUS

DOCUMENT NUMBER: 145:230880

TITLE: Preparation of novel ligands for the HisB10 Zn<sup>2+</sup> sites  
of the R-state insulin hexamer and their use in  
pharmaceutical preparations comprising insulin  
INVENTOR(S): Kaarsholm, Niels Christian; Birk Olsen, Helle; Madsen,  
Peter; Oestergaard, Soeren; Jakobsen, Palle; Moeller  
Tagmose, Tina

PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.

SOURCE: PCT Int. Appl., 424pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2006082245	A1	20060810	WO 2006-EP50675	20060206
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,			

CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

EP 2005-100835

A 20050207

OTHER SOURCE(S):

MARPAT 145:230880

AB The invention provides novel pharmaceutical prepsns. comprising (1) insulin; (2) zinc ions; and (3) zinc-binding, branched ligands of formula CGr-Lnk-Frg1-Frg2-X (I; CGr = a chemical group which binds reversibly to HisB10 Zn<sup>2+</sup> site of insulin hexamer selected from carboxylates, phenolates, benzotriazoles, tetrazoles, thiazolidinediones, etc.; Lnk = a linker selected from a valence bond, -B1-B2-SO<sub>2</sub>-, -B1-B2-NH-, -B1-B2-CO-, -B1-B2-CH<sub>2</sub>-; B1 = a valence bond, O, S, NH and derivs.; B2 = a valence bond, (un)substituted alk(en/yn)ylene, hetero/arylene, etc.; Frg1 = fragment containing 0-5 neutral  $\alpha$ - or  $\beta$ -amino acids; Frg2 = branched fragment comprising 1 to 20 pos. charged groups independently selected from amino or guanidino groups; X = OH, NH<sub>2</sub>, or diamino group; including acid or base addition salts, and any optical isomers or mixture of optical isomers, racemates, and tautomers). About 1000 prepsns. for CGr derivs., e.g. CGr-carboxylic acids and derivs., are given. Nineteen peptidic ligands I were prepared by coupling the resin-bound peptides with either 4-[3-(1H-tetrazol-5-yl)carbazol-9-ylmethyl]benzoic acid or 5-[[6-(5-cyano-1H-[1,2,3]triazol-4-yl)naphthalen-2-yl]oxy]pentanoic acid or 4-[4-(2,4-dioxothiazolidin-5-ylidenemethyl)naphthalen-1-yloxy]butyric acid. The binding affinity of representative ligands I to metal site of insulin R6 hexamers was examined (data given). The resulting prepsns. are capable of prolonging the action of insulin preparation and are useful for treating Type 1 or Type 2 diabetes.

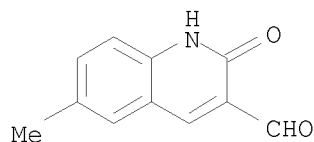
IT 101382-53-0 123990-78-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of ligands for HisB10 Zn<sup>2+</sup> sites of R-state insulin hexamer and their use in pharmaceutical prepsns. comprising insulin)

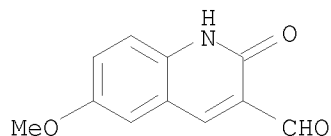
RN 101382-53-0 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



RN 123990-78-3 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



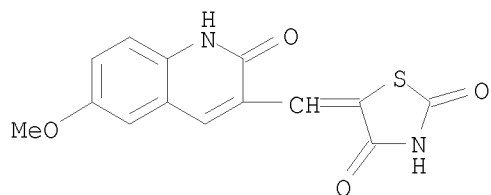
IT 503827-44-9P 503827-49-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

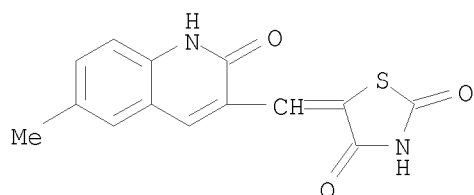
(preparation of ligands for HisB10 Zn<sup>2+</sup> sites of R-state insulin hexamer and their use in pharmaceutical prepsns. comprising insulin)

RN 503827-44-9 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



RN 503827-49-4 CAPLUS  
 CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 26-30

L28 ANSWER 26 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:689592 CAPLUS  
 DN 145:271677  
 TI A convenient synthesis of 2-chlorobenzo[b][1,8]naphthyridines  
 AU Vandana, J. Christobel; Ragunath, L.; Rajendran, S. P.  
 CS Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (2006), 45B(6), 1564-1566  
 CODEN: IJSBDB; ISSN: 0376-4699  
 PB National Institute of Science Communication and Information Resources  
 DT Journal  
 LA English  
 OS CASREACT 145:271677  
 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 27 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:672263 CAPLUS  
 DN 145:321978  
 TI A study of the analytical behaviour of selected synthetic and naturally occurring quinolines using electrospray ionization ion trap mass spectrometry, liquid chromatography and gas chromatography and the construction of an appropriate database for quinoline characterization  
 AU O'Donnell, F.; Ramachandran, V. N.; Smyth, W. F.; Hack, C. J.; Patton, E.  
 CS School of Biomedical Sciences, University of Ulster Coleraine, Coleraine, Co. Derry, BT52 1SA, UK  
 SO Analytica Chimica Acta (2006), 572(1), 63-76  
 CODEN: ACACAM; ISSN: 0003-2670  
 PB Elsevier B.V.  
 DT Journal  
 LA English  
 RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 28 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:583007 CAPLUS  
 DN 145:210921  
 TI An efficient synthesis of benzo[b][1,8]naphthyridine-3-carboxylic methyl esters  
 AU Nithyadevi, V.; Rajendran, S. P.  
 CS Department of Chemistry, Bharathiar University, Coimbatore, 641046, India  
 SO Journal of Heterocyclic Chemistry (2006), 43(3), 755-758  
 CODEN: JHTCAD; ISSN: 0022-152X  
 PB HeteroCorporation  
 DT Journal  
 LA English  
 OS CASREACT 145:210921  
 RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 29 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:207342 CAPLUS  
 DN 145:314438  
 TI Structural Elucidation Using <sup>1</sup>H-NMR, <sup>13</sup>C-NMR, and Mass Spectroscopic Study of 3-(Ethoxy-hydroxy-methyl)-quinolin-2(1H)-one and 2-Benzyl-3-formylquinoline  
 AU Dhanabal, T.; Suresh, T.; Mohan, P.  
 CS Department of Chemistry, Bharathiar University, Tamil Nadu, 641 046, India  
 SO Spectroscopy Letters (2006), 39(2), 117-126  
 CODEN: SPLEBX; ISSN: 0038-7010  
 PB Taylor & Francis, Inc.  
 DT Journal  
 LA English  
 OS CASREACT 145:314438  
 RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 30 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:74852 CAPLUS  
 DN 144:164276  
 TI Treating neurodegenerative conditions  
 IN Mandelkow, Eckard; Mandelkow, Eva-Maria; Biernat, Jacek; Bergen, Martin V.; Pickhardt, Markus  
 PA Max Planck Gesellschaft zur Foerderung der Wissenschaft, Germany  
 SO PCT Int. Appl., 136 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	US 20060223812	A1	20061005	US 2006-351884	20060210
PRAI	WO 2004-EP8031	A2	20040717		

US 2005-652284P P 20050211  
OS MARPAT 144:164276  
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 30 IBIB ABS HITSTR

L28 ANSWER 30 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2006:74852 CAPLUS  
DOCUMENT NUMBER: 144:164276  
TITLE: Treating neurodegenerative conditions  
INVENTOR(S): Mandelkow, Eckard; Mandelkow, Eva-Maria; Biernat,  
Jacek; Bergen, Martin V.; Pickhardt, Markus  
PATENT ASSIGNEE(S): Max Planck Gesellschaft zur Foerderung der  
Wissenschaft, Germany  
SOURCE: PCT Int. Appl., 136 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2006007864	A1	20060126	WO 2004-EP8031	20040717
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
US 20060223812	A1	20061005	US 2006-351884	20060210
PRIORITY APPLN. INFO.:			WO 2004-EP8031	A2 20040717
			US 2005-652284P	P 20050211

OTHER SOURCE(S): MARPAT 144:164276

AB The present invention relates to the use of compds. capable of inhibiting protein aggregate formation and capable of depolymg. protein aggregates for the preparation of a pharmaceutical composition for treating neurodegenerative

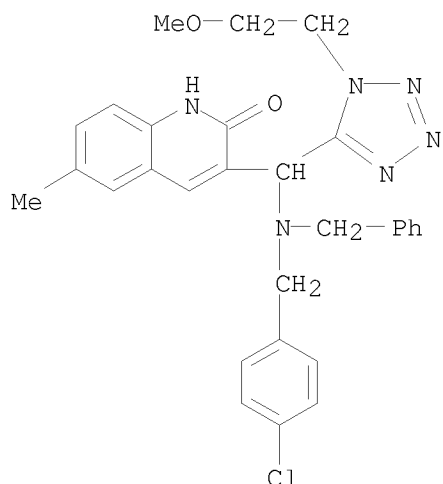
conditions such as Alzheimer disease.

IT 523984-58-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compds. to treat neurodegenerative conditions)

RN 523984-58-9 CAPLUS

CN 2(1H)-Quinolinone, 3-[[[(4-chlorophenyl)methyl](phenylmethyl)amino][1-(2-methoxyethyl)-1H-tetrazol-5-yl)methyl]-6-methyl- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 31-35

L28 ANSWER 31 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:54922 CAPLUS

DN 144:150646

TI Preparation of novel ligands with protamine extensions for the HisB10 Zn<sup>2+</sup> sites of the R-state insulin hexamer and their use in pharmaceutical preparations comprising insulin

IN Olsen, Helle Birk; Kaarsholm, Niels Christian; Madsen, Peter; Balschmidt, Per

PA Novo Nordisk A/S, Den.

SO PCT Int. Appl., 408 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006005683	A1	20060119	WO 2005-EP53070	20050629
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1768694	A1	20070404	EP 2005-758689	20050629
	R:				
	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	JP 2008505866	T	20080228	JP 2007-519777	20050629
PRAI	DK 2004-1091	A	20040709		
	WO 2005-EP53070	W	20050629		
OS	MARPAT 144:150646				

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 32 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:26228 CAPLUS  
DN 144:128863  
TI Derivatives of 3-aminomethylquinolone-2 as inhibitors of NO-synthetase and methods for their preparation and biologically active compounds and pharmaceutical composition based thereon  
IN Kirpichenok, M. A.; Genis, D. V.; Rodin, O. G.; Solov'ev, A. N.; Kochubei, V. S.; Saekov, V. N.  
PA Obshchestvo s Ogranichennoi Otvetstvennost'yu "Asineks Medkhim", Russia  
SO Russ., 23 pp.  
CODEN: RUXXE7  
DT Patent  
LA Russian  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	RU 2267485	C2	20060110	RU 2003-129723	20031007
	WO 2006054912	A1	20060526	WO 2004-RU457	20041118
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI	RU 2003-129723	A	20031007		

L28 ANSWER 33 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1273698 CAPLUS  
DN 144:254021  
TI Synthesis, characterization and antimicrobial activities of fused 1,6-naphthyridines  
AU Suresh, T.; Dhanabal, T.; Kumar, R. Nandha; Mohan, P. S.  
CS Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (2005), 44B(11), 2375-2379  
CODEN: IJSBDB; ISSN: 0376-4699  
PB National Institute of Science Communication and Information Resources  
DT Journal  
LA English  
OS CASREACT 144:254021

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 34 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1225850 CAPLUS  
DN 144:88253  
TI Synthesis of substituted 1,3-dimethyl-1H-quinoxalin-2-ones from aniline derivatives  
AU Li, Xun; Wang, Donghua; Wu, Jifeng; Xu, Wenfang  
CS College of Pharmacy, Shandong University, Jinan, 250012, Peop. Rep. China  
SO Heterocycles (2005), 65(11), 2741-2751  
CODEN: HTCYAM; ISSN: 0385-5414  
PB Japan Institute of Heterocyclic Chemistry  
DT Journal

LA English  
OS CASREACT 144:88253  
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 35 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1077191 CAPLUS  
DN 143:379513  
TI Effect of 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)-quinolin-2(1H)-one (BMS-223131), a novel opener of large conductance Ca<sup>2+</sup>-activated K<sup>+</sup> (maxi-K) channels on normal and stress-aggravated colonic motility and visceral nociception. [Erratum to document cited in CA143:071440]  
AU Sivarao, Digavalli V.; Newberry, Kimberly; Langdon, Shaun; Lee, Alicia V.; Hewawasam, Plyasena; Plym, Mary Jane; Signor, Laura; Myers, Robert; Lodge, Nicholas J.  
CS Neuroscience Drug Discovery, Pharmaceutical Research Institute, Bristol Myers Squibb Co., Wallingford, CT, USA  
SO Journal of Pharmacology and Experimental Therapeutics (2005), 315(1), 476  
CODEN: JPETAB; ISSN: 0022-3565  
PB American Society for Pharmacology and Experimental Therapeutics  
DT Journal  
LA English

=> D L28 36-40

L28 ANSWER 36 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1011081 CAPLUS  
DN 143:440373  
TI Reaction of some furan-2,3-diones with various 1,2-phenylenediamines  
AU Saripinar, Emin; Saglam, Ertugrul Gazi; Oncel, Ibrahim; Ilhan, Ilhan Ozer; Goktas, Lale; Kok, Tevfik Riza; Akcamur, Yunus  
CS Department of Chemistry, Arts and Sciences Faculty, Erciyes University, Kayseri, 38039, Turk.  
SO Heterocycles (2005), 65(9), 2161-2167  
CODEN: HTCYAM; ISSN: 0385-5414  
PB Japan Institute of Heterocyclic Chemistry  
DT Journal  
LA English  
OS CASREACT 143:440373  
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 37 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1010091 CAPLUS  
DN 144:467988  
TI Schiff Bases Derived from 6-Amino-2H-chromen-2-one. Synthesis and 1H NMR Spectra  
AU Ganushchak, N. I.; Kobrin, L. O.; Bilaya, E. E.; Mizyuk, V. L.  
CS Ivan Franko Lviv National University, Lvov, 79005, Ukraine  
SO Russian Journal of Organic Chemistry (2005), 41(7), 1064-1070  
CODEN: RJOCEQ; ISSN: 1070-4280  
PB Pleiades Publishing, Inc.  
DT Journal  
LA English  
OS CASREACT 144:467988  
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 38 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1007164 CAPLUS



DN 143:440372  
TI Novel approach to 3-methyl-1H-quinoxalin-2-ones  
AU Li, Xun; Wang, Donghua; Wu, Jifeng; Xu, Wenfang  
CS School of Pharmacy, Shandong University, Ji'nan, Peop. Rep. China  
SO Synthetic Communications (2005), 35(19), 2553-2560  
CODEN: SYNCAV; ISSN: 0039-7911  
PB Taylor & Francis, Inc.  
DT Journal  
LA English  
OS CASREACT 143:440372  
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 39 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:921427 CAPLUS  
DN 143:241376  
TI Analogs of a potent maxi-K potassium channel opener with an improved  
inhibitory profile toward cytochrome P450 isozymes  
AU Vrudhula, Vivekananda M.; Dasgupta, Bireshwar; Boissard, Christopher G.;  
Gribkoff, Valentin K.; Santone, Kenneth S.; Dalterio, Richard A.; Lodge,  
Nicholas J.; Starrett, John E.  
CS Bristol-Myers Squibb Pharmaceutical Research Institute, Wallingford, CT,  
06492, USA  
SO Bioorganic & Medicinal Chemistry Letters (2005), 15(19), 4286-4290  
CODEN: BMCLE8; ISSN: 0960-894X  
PB Elsevier B.V.  
DT Journal  
LA English  
OS CASREACT 143:241376  
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 40 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:623965 CAPLUS  
DN 144:412337  
TI Synthesis of Selenolo(2,3-b)quinoline-2-carboxylic Ethyl Esters:  
Cytogenetic Studies on Human Peripheral Blood Leucocyte Cultures, and  
Anti-Bacterial Studies, and Anti-Fungal Studies of Their Effects  
AU Nithyadevi, V.; Rajendran, S.  
CS Department of Chemistry, Bharathiar University, Tamil Nadu, Coimbatore,  
India  
SO Phosphorus, Sulfur and Silicon and the Related Elements (2005), 180(8),  
1849-1862  
CODEN: PSSLEC; ISSN: 1042-6507  
PB Taylor & Francis, Inc.  
DT Journal  
LA English  
OS CASREACT 144:412337  
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 41-45

L28 ANSWER 41 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:618398 CAPLUS  
DN 144:311967  
TI Synthesis and reactions of some novel 3-pyrazolyl-2-quinolinones  
AU Abass, Mohamed; Othman, Elham S.  
CS Department of Chemistry, Faculty of Education, Ain Shams University,  
Cairo, 11711, Egypt  
SO International Electronic Conferences on Synthetic Organic Chemistry, 5th,

6th, Sept. 1-30, 2001 and 2002 [and] 7th, 8th, Nov. 1-30, 2003 and 2004  
(2004), 1369-1373. Editor(s): Seijas, Julio A. Publisher: Molecular  
Diversity Preservation International, Basel, Switz.  
CODEN: 69GTCO

DT Conference; (computer optical disk)

LA English

OS CASREACT 144:311967

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 42 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:567163 CAPLUS

DN 143:78213

TI Preparation of cyclohexylalkyl quinolinone and quinoxalinone derivatives  
as poly(ADP-ribose) polymerase (PARP) inhibitors

IN Mabire, Dominique Jean-Pierre; Van Dun, Jacobus Alphonsus Josephus;  
Somers, Maria Victorina Francisca; Wouters, Walter Boudewijn Leopold

PA Janssen Pharmaceutica N. V., Belg.

SO PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2005058843	A1	20050630	WO 2004-EP13165	20041118
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004299183	A1	20050630	AU 2004-299183	20041118
	CA 2548273	A1	20050630	CA 2004-2548273	20041118
	EP 1694653	A1	20060830	EP 2004-803192	20041118
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR, IS, YU				
	CN 1890225	A	20070103	CN 2004-80036656	20041118
	BR 2004017571	A	20070320	BR 2004-17571	20041118
	JP 2007513898	T	20070531	JP 2006-543409	20041118
	MX 2006PA06573	A	20060731	MX 2006-PA6573	20060609
	IN 2006DN03331	A	20070824	IN 2006-DN3331	20060609
	NO 2006003129	A	20060705	NO 2006-3129	20060705
PRAI	EP 2003-78918	A	20031210		
	WO 2004-EP13165	W	20041118		

OS CASREACT 143:78213; MARPAT 143:78213

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 43 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:523430 CAPLUS

DN 143:60003

TI Preparation of 6-substituted 2-quinolinones and 2-quinoxalinones as  
poly(ADP-ribose) polymerase inhibitors

IN Mabire, Dominique Jean-Pierre; Guillemont, Jerome Emile Georges; Van Dun,  
Jacobus Alphonsus Josephus; Somers, Maria Victorina Francisca; Wouters,

Walter Boudewijn Leopold  
 PA Janssen Pharmaceutica N. V., Belg.  
 SO PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005054210	A1	20050616	WO 2004-EP13164	20041118
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004295059	A1	20050616	AU 2004-295059	20041118
	CA 2546657	A1	20050616	CA 2004-2546657	20041118
	EP 1709012	A1	20061011	EP 2004-819602	20041118
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR, IS, YU				
	CN 1890224	A	20070103	CN 2004-80035857	20041118
	BR 2004016532	A	20070109	BR 2004-16532	20041118
	JP 2007513101	T	20070524	JP 2006-541830	20041118
	IN 2006DN03071	A	20070810	IN 2006-DN3071	20060529
	US 20070129375	A1	20070607	US 2006-596086	20060530
	MX 2006PA06255	A	20060809	MX 2006-PA6255	20060602
	NO 2006003028	A	20060628	NO 2006-3028	20060628
PRAI	EP 2003-78859	A	20031205		
	WO 2004-EP13164	W	20041118		

OS CASREACT 143:60003; MARPAT 143:60003

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 44 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:523424 CAPLUS

DN 143:60001

TI Preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors

IN Mabire, Dominique Jean-pierre; Guillemont, Jerome Emile Georges; Van Dun, Jacobus Alphonsus Josephus; Somers, Maria Victorina Francisca; Wouters, Walter Boudewijn Leopold

PA Janssen Pharmaceutica N. V., Belg.

SO PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005054201	A1	20050616	WO 2004-EP13163	20041118
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,  
 SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
 NE, SN, TD, TG

AU	2004295058	A1	20050616	AU	2004-295058	20041118
CA	2546300	A1	20050616	CA	2004-2546300	20041118
EP	1687277	A1	20060809	EP	2004-819601	20041118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS						
CN	1882547	A	20061220	CN	2004-80034176	20041118
BR	2004016206	A	20061226	BR	2004-16206	20041118
JP	2007511574	T	20070510	JP	2006-540338	20041118
US	20070072842	A1	20070329	US	2006-595891	20060518
IN	2006DN02813	A	20070803	IN	2006-DN2813	20060518
MX	2006PA05687	A	20060817	MX	2006-PA5687	20060519
NO	2006002894	A	20060809	NO	2006-2894	20060620
PRAI	WO 2003-EP13028	A	20031120			
	EP 2003-78860	A	20031205			
	WO 2003-EP300130	A	20031120			
	WO 2003-EP313028	A	20031120			
	WO 2004-EP13163	W	20041118			
OS	CASREACT 143:60001; MARPAT 143:60001					
RE.CNT	2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD					
	ALL CITATIONS AVAILABLE IN THE RE FORMAT					

L28 ANSWER 45 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:413542 CAPLUS  
 DN 143:71440  
 TI Effect of 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)-quinolin-2(1H)-one (BMS-223131), a novel opener of large conductance Ca<sup>2+</sup>-activated K<sup>+</sup> (maxi-K) channels on normal and stress-aggravated colonic motility and visceral nociception  
 AU Sivarao, Digavalli V.; Newberry, Kimberly; Langdon, Shaun; Lee, Alicia V.; Hewawasam, Piyasena; Plym, Mary Jane; Signor, Laura; Myers, Robert; Lodge, Nicholas J.  
 CS Neuroscience Drug Discovery, Pharmaceutical Research Institute, Bristol Myers Squibb Co., Wallingford, CT, USA  
 SO Journal of Pharmacology and Experimental Therapeutics (2005), 313(2), 840-847  
 CODEN: JPETAB; ISSN: 0022-3565  
 PB American Society for Pharmacology and Experimental Therapeutics  
 DT Journal  
 LA English  
 RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 46-50

L28 ANSWER 46 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:298745 CAPLUS  
 DN 143:59923  
 TI A convenient one-pot synthesis of benzopyrimido[1,8]naphthyridines by Knoevenagel condensation  
 AU Kumar, R. Nandha; Suresh, T.; Mohan, P. S.  
 CS Department of Chemistry, Bharathiar University, Coimbatore, 641046, India  
 SO Chemistry of Heterocyclic Compounds (New York, NY, United States) (2004), 40(11), 1490-1492  
 CODEN: CHCCAL; ISSN: 0009-3122  
 PB Springer Science+Business Media, Inc.

DT Journal  
LA English  
OS CASREACT 143:59923  
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 47 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:283877 CAPLUS  
DN 142:481926  
TI Microwave-assisted multistep synthesis of functionalized  
4-arylquinolin-2(1H)-ones using palladium-catalyzed cross-coupling  
chemistry  
AU Glasnov, Toma N.; Stadlbauer, Wolfgang; Kappe, C. Oliver  
CS Institute of Chemistry Organic and Bioorganic Chemistry,  
Karl-Franzens-University Graz, Graz, A-8010, Austria  
SO Journal of Organic Chemistry (2005), 70(10), 3864-3870  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 142:481926  
RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 48 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:80538 CAPLUS  
DN 142:316680  
TI Synthesis, Structure-Activity Relationship, and Receptor Pharmacology of a  
New Series of Quinoline Derivatives Acting as Selective, Noncompetitive  
mGlu1 Antagonists  
AU Mabire, Dominique; Coupa, Sophie; Adelinet, Christophe; Poncelet, Alain;  
Simonnet, Yvan; Venet, Marc; Wouters, Ria; Lesage, Anne S. J.; Van  
Beijsterveldt, Ludy; Bischoff, Francois  
CS Department of Medicinal Chemistry, Johnson & Johnson Pharmaceutical  
Research Development, Val de Reuil, F-27106, Fr.  
SO Journal of Medicinal Chemistry (2005), 48(6), 2134-2153  
CODEN: JMCMAR; ISSN: 0022-2623  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 142:316680  
RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 49 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:909249 CAPLUS  
DN 142:410804  
TI Structural Elucidation: IR, 1H-NMR and Mass Spectroscopic Study of Novel  
4-Amino-6-oxo,4a,5,12,12a-tetrahydro(7H), benzopyrano[3,2-c]quinoline  
AU Nandha Kumar, R.; Suresh, T.; Mohan, P. S.  
CS Department of Chemistry, Bharathiar University, Tamil Nadu, India  
SO Spectroscopy Letters (2004), 37(6), 581-585  
CODEN: SPLEBX; ISSN: 0038-7010  
PB Marcel Dekker, Inc.  
DT Journal  
LA English  
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 50 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:887786 CAPLUS  
DN 142:261432

TI Synthesis and spectral studies of thieno(2,3-b)quinoline derivatives  
 AU Nithyadevi, V.; Sampathkumar, N.; Rajendran, S. P.  
 CS Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
 SO Asian Journal of Chemistry (2004), 16(3-4), 1594-1598  
 CODEN: AJCHEW; ISSN: 0970-7077  
 PB Asian Journal of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 142:261432  
 RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 51-55

L28 ANSWER 51 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:886367 CAPLUS  
 DN 142:241  
 TI Design of Non-nucleoside Inhibitors of HIV-1 Reverse Transcriptase with  
 Improved Drug Resistance Properties. 2.  
 AU Freeman, George A.; Andrews, C. Webster, III; Hopkins, Andrew L.; Lowell,  
 Gina S.; Schaller, Lee T.; Cowan, Jill R.; Gonzales, Stephen S.; Koszalka,  
 George W.; Hazen, Richard J.; Boone, Lawrence R.; Ferris, Rob G.; Creech,  
 Katrina L.; Roberts, Grace B.; Short, Steven A.; Weaver, Kurt; Reynolds,  
 David J.; Milton, John; Ren, Jingshan; Stuart, David I.; Stammers, David  
 K.; Chan, Joseph H.  
 CS GlaxoSmithKline Research and Development, Research Triangle Park, NC,  
 27709, USA  
 SO Journal of Medicinal Chemistry (2004), 47(24), 5923-5936  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 142:241  
 RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 52 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:780555 CAPLUS  
 DN 141:301423  
 TI Preparation of high-affinity ligands for crystalline formulations of  
 NPH-insulin  
 IN Balschmidt, Per; Olsen, Helle Birk; Kaarsholm, Niels C.; Madsen, Peter;  
 Jakobsen, Palle; Ludvigsen, Svend; Schluckebier, Gerd; Steensgaard, Dorte  
 Bjerre; Petersen, Anders Klarskov  
 PA Novo Nordisk A/S, Den.  
 SO PCT Int. Appl., 394 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2004080481	A1	20040923	WO 2004-DK160	20040312
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,				

ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,  
 TD, TG

EP 1605967 A1 20051221 EP 2004-719932 20040312  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

JP 2006519791 T 20060831 JP 2006-504321 20040312  
 US 20060258561 A1 20061116 US 2005-226870 20050909

PRAI DK 2003-383 A 20030313  
 US 2003-455341P P 20030317  
 WO 2004-DK160 W 20040312

OS MARPAT 141:301423

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 53 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:780554 CAPLUS  
 DN 141:301422

TI Preparation of heterocyclic ligands for acid-stabilized insulin analogs  
 IN Ostergaard, Soren; Olsen, Helle Birk; Kaarsholm, Niels C.; Madsen, Peter;  
 Jakobsen, Palle; Ludvigsen, Svend; Schluckebier, Gerd; Steensgaard, Dorte  
 Bjerre; Petersen, Anders Klarskov  
 PA Novo Nordisk A/S, Den.  
 SO PCT Int. Appl., 473 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080480	A1	20040923	WO 2004-DK158	20040311
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004218808	A1	20040923	AU 2004-218808	20040311
CA 2522818	A1	20040923	CA 2004-2522818	20040311
EP 1610812	A1	20060104	EP 2004-719368	20040311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
BR 2004008229	A	20060221	BR 2004-8229	20040311
CN 1787833	A	20060614	CN 2004-80012690	20040311
JP 2007523842	T	20070823	JP 2006-504320	20040311
US 20060069013	A1	20060330	US 2005-227760	20050912
NO 2005004555	A	20051117	NO 2005-4555	20051004
PRAI DK 2003-365	A	20030311		
US 2003-455400P	P	20030317		
WO 2004-DK158	A	20040311		
OS MARPAT 141:301422				
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L28 ANSWER 54 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:734407 CAPLUS  
 DN 142:219090

TI 4-(4-Methylbenzoyl)-5-(4-methylphenyl)furan-2,3-dione: Synthesis,  
 thermolysis and reactions with aromatic amines and diamines  
 AU Yildirim, Ismail; Koca, Irfan  
 CS Arts and Sciences Faculty, Chemistry Department, Erciyes University,  
 Kayseri, 38039, Turk.  
 SO Asian Journal of Chemistry (2004), 16(2), 899-909  
 CODEN: AJCHEW; ISSN: 0970-7077  
 PB Asian Journal of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 142:219090  
 RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 55 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:734398 CAPLUS  
 DN 142:240344  
 TI Synthesis and comparison of the biological activities of derivatives of  
 3,5-diphenyl-2H-pyrano[2,3-b]quinolin-2-one  
 AU Kumar, N. Venkatesh; Kumar, N. Sampath; Rajendran, S. P.  
 CS Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
 SO Asian Journal of Chemistry (2004), 16(2), 848-852  
 CODEN: AJCHEW; ISSN: 0970-7077  
 PB Asian Journal of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 142:240344  
 RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 52-53 IBIB ABS HITSTR

L28 ANSWER 52 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:780555 CAPLUS  
 DOCUMENT NUMBER: 141:301423  
 TITLE: Preparation of high-affinity ligands for crystalline  
 formulations of NPH-insulin  
 INVENTOR(S): Balschmidt, Per; Olsen, Helle Birk; Kaarsholm, Niels  
 C.; Madsen, Peter; Jakobsen, Palle; Ludvigsen, Svend;  
 Schluckebier, Gerd; Steensgaard, Dorte Bjerre;  
 Petersen, Anders Klarskov  
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.  
 SOURCE: PCT Int. Appl., 394 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2004080481	A1	20040923	WO 2004-DK160	20040312
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,			



SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,  
 TD, TG  
 EP 1605967 A1 20051221 EP 2004-719932 20040312  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK  
 JP 2006519791 T 20060831 JP 2006-504321 20040312  
 US 20060258561 A1 20061116 US 2005-226870 20050909  
 PRIORITY APPLN. INFO.: DK 2003-383 A 20030313  
 US 2003-455341P P 20030317  
 WO 2004-DK160 W 20040312

OTHER SOURCE(S): MARPAT 141:301423

AB This invention relates to NPH-insulin (crystalline prepns.) that are prepared in

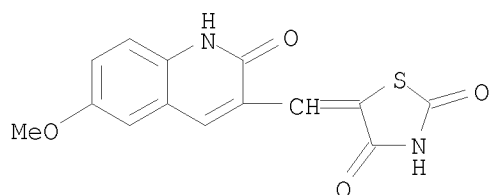
the presence of certain high-affinity ligands for the HisB10-Zn<sup>2+</sup>, sites of the R-state insulin hexamer. Preparation of NPH-insulin in the presence of high-affinity ligand results in crystalline NPH-insulin suspensions that are absorbed more slowly from subcutis than regular NPH-insulin. Hence the resulting action profile is longer and the spike is less pronounced than observed with regular NPH-insulin. Thus, 1H-benzotriazole-5-carboxylic acid phenylamide was prepared by the reaction of benzotriazole-5-carboxylic acid with aniline in the presence of EDAC in DMF. A formulation contained a ligand-incorporated NPH insulin and.

IT 503827-44-9P 503827-49-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of high-affinity ligands for crystalline formulations of NPH-insulin)

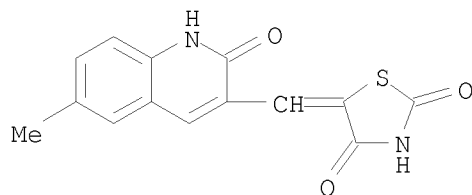
RN 503827-44-9 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



RN 503827-49-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 53 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:780554 CAPLUS

DOCUMENT NUMBER: 141:301422

TITLE: Preparation of heterocyclic ligands for

INVENTOR(S): acid-stabilized insulin analogs  
Ostergaard, Soren; Olsen, Helle Birk; Kaarsholm, Niels  
C.; Madsen, Peter; Jakobsen, Palle; Ludvigsen, Svend;  
Schluckebier, Gerd; Steensgaard, Dorte Bjerre;  
Petersen, Anders Klarskov  
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.  
SOURCE: PCT Int. Appl., 473 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080480	A1	20040923	WO 2004-DK158	20040311
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004218808	A1	20040923	AU 2004-218808	20040311
CA 2522818	A1	20040923	CA 2004-2522818	20040311
EP 1610812	A1	20060104	EP 2004-719368	20040311
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK			
BR 2004008229	A	20060221	BR 2004-8229	20040311
CN 1787833	A	20060614	CN 2004-80012690	20040311
JP 2007523842	T	20070823	JP 2006-504320	20040311
US 20060069013	A1	20060330	US 2005-227760	20050912
NO 2005004555	A	20051117	NO 2005-4555	20051004
PRIORITY APPLN. INFO.:			DK 2003-365	A 20030311
			US 2003-455400P	P 20030317
			WO 2004-DK158	A 20040311

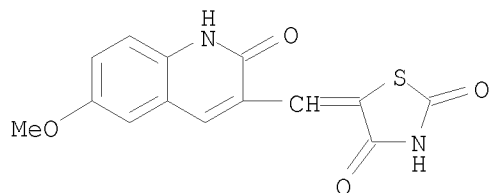
OTHER SOURCE(S): MARPAT 141:301422

AB Novel ligands for the His-B10 Zn<sup>2+</sup> sites of the R-state insulin hexamer that are capable of prolonging the action of insulin preps. are disclosed. A mixture of 4-aminobenzonitrile, sodium azide and ammonium chloride in DMF was heated at 125° for 16 h. The cooled mixture was filtered and the filtrate was concentrated to give 5-(4-aminophenyl)-2H-tetrazole. This was used as the ligand for His-B10 Zn<sup>2+</sup> sites of the R-state insulin hexamer.

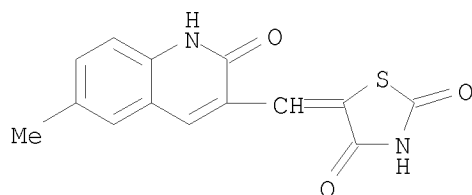
IT 503827-44-9P 503827-49-4P  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of heterocyclic ligands for acid-stabilized insulin analogs)

RN 503827-44-9 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



RN 503827-49-4 CAPLUS  
 CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 56-60

L28 ANSWER 56 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:713030 CAPLUS  
 DN 142:219172  
 TI Synthesis of thieno(2,3-b)quinoline-2-carboxylic esters from 3-(2-oxo-1,2-dihydro-3-quinolyl)acrylic esters  
 AU Nithyadevi, V.; Mohanapriya, S.; Rajendran, S. P.  
 CS Department of Chemistry, Bharathiar University, Coimbatore, 641046, India  
 SO Heterocyclic Communications (2004), 10(4-5), 339-342  
 CODEN: HCOMEX; ISSN: 0793-0283  
 PB Freund Publishing House Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 142:219172  
 RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 57 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:707863 CAPLUS  
 DN 141:379764  
 TI Synthesis of 2-Quinolones via Palladium-Catalyzed Carbonylative Annulation of Internal Alkynes by N-Substituted o-Iodoanilines  
 AU Kadnikov, Dmitry V.; Larock, Richard C.  
 CS Department of Chemistry, Iowa State University, Ames, IA, 50011, USA  
 SO Journal of Organic Chemistry (2004), 69(20), 6772-6780  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 141:379764  
 RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 58 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:565093 CAPLUS  
 DN 141:117166  
 TI Atropisomers of 3-substituted-4-arylquinolin-2-one derivatives for  
 modulation of calcium-activated potassium channels  
 IN Vrudhula, Vivekananda M.; Gribkoff, Valentin Kala; Dasgupta, Bireshwar;  
 Boissard, Christopher G.  
 PA Bristol-Myers Squibb Company, USA  
 SO PCT Int. Appl., 44 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004058260	A1	20040715	WO 2003-US41548	20031218
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	US 20040147749	A1	20040729	US 2003-739449	20031217
	US 6939968	B2	20050906		
	AU 2003300425	A1	20040722	AU 2003-300425	20031218
	EP 1575589	A1	20050921	EP 2003-814399	20031218
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	TR 200502440	T2	20051021	TR 2005-2440	20031218
	BR 2003017679	A	20051129	BR 2003-17679	20031218
	CN 1750821	A	20060322	CN 2003-80109833	20031218
	JP 2006512378	T	20060413	JP 2004-562595	20031218
	MX 2005PA06814	A	20050908	MX 2005-PA6814	20050621
	ZA 2005005077	A	20060927	ZA 2005-5077	20050622
	NO 2005003078	A	20050829	NO 2005-3078	20050623
	IN 2005DN02882	A	20070112	IN 2005-DN2882	20050628
PRAI	US 2002-436160P	P	20021223		
	WO 2003-US41548	W	20031218		
OS	MARPAT 141:117166				

L28 ANSWER 59 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:550870 CAPLUS  
 DN 141:106476  
 TI Preparation of heterocyclic compounds as ligands for stabilizing insulin  
 compositions  
 IN Kaarsholm, Niels Christian; Madsen, Peter; Schlein, Morten; Olsen, Helle  
 Birk; Havelund, Svend; Steensgaard, Dorte Bjerre; Ludvigsen, Svend;  
 Jakobsen, Palle; Petersen, Anders Klarskov; Schluckebier, Gerd  
 PA Novo Nordisk A/S, Den.  
 SO PCT Int. Appl., 432 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004056347	A2	20040708	WO 2003-DK931	20031222
	WO 2004056347	A3	20040812		

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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003291972 A1 20040714 AU 2003-291972 20031222  
 EP 1585541 A2 20051019 EP 2003-767488 20031222  
 EP 1585541 B1 20071114

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

JP 2006516966 T 20060713 JP 2005-502527 20031222  
 AT 378063 T 20071115 AT 2003-767488 20031222  
 US 20050065066 A1 20050324 US 2004-825995 20040416

PRAI DK 2002-1991 A 20021220  
 US 2003-439382P P 20030110  
 WO 2003-DK931 W 20031222

OS MARPAT 141:106476

L28 ANSWER 60 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:337507 CAPLUS  
 DN 141:54222  
 TI A new synthesis of 5-substituted-3-phenyl-2H-pyrano[2,3-b]quinolin-2-ones  
 AU Kumar, N. Venkatesh; Subramani, B.; Rajendran, S. P.  
 CS Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
 SO Journal of the Indian Chemical Society (2003), 80(10), 918-920  
 CODEN: JICSAH; ISSN: 0019-4522  
 PB Indian Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 141:54222  
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 58-60

L28 ANSWER 58 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:565093 CAPLUS  
 DN 141:117166  
 TI Atropisomers of 3-substituted-4-arylquinolin-2-one derivatives for modulation of calcium-activated potassium channels  
 IN Vrudhula, Vivekananda M.; Gribkoff, Valentin Kala; Dasgupta, Bireshwar; Boissard, Christopher G.  
 PA Bristol-Myers Squibb Company, USA  
 SO PCT Int. Appl., 44 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004058260	A1	20040715	WO 2003-US41548	20031218
	W:				
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TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
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 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 20040147749 A1 20040729 US 2003-739449 20031217  
 US 6939968 B2 20050906  
 AU 2003300425 A1 20040722 AU 2003-300425 20031218  
 EP 1575589 A1 20050921 EP 2003-814399 20031218  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 TR 200502440 T2 20051021 TR 2005-2440 20031218  
 BR 2003017679 A 20051129 BR 2003-17679 20031218  
 CN 1750821 A 20060322 CN 2003-80109833 20031218  
 JP 2006512378 T 20060413 JP 2004-562595 20031218  
 MX 2005PA06814 A 20050908 MX 2005-PA6814 20050621  
 ZA 2005005077 A 20060927 ZA 2005-5077 20050622  
 NO 2005003078 A 20050829 NO 2005-3078 20050623  
 IN 2005DN02882 A 20070112 IN 2005-DN2882 20050628  
 PRAI US 2002-436160P P 20021223  
 WO 2003-US41548 W 20031218  
 OS MARPAT 141:117166

L28 ANSWER 59 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:550870 CAPLUS  
 DN 141:106476  
 TI Preparation of heterocyclic compounds as ligands for stabilizing insulin  
 compositions  
 IN Kaarsholm, Niels Christian; Madsen, Peter; Schleim, Morten; Olsen, Helle  
 Birk; Havelund, Svend; Steensgaard, Dorte Bjerre; Ludvigsen, Svend;  
 Jakobsen, Palle; Petersen, Anders Klarskov; Schluckebier, Gerd  
 PA Novo Nordisk A/S, Den.  
 SO PCT Int. Appl., 432 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004056347	A2	20040708	WO 2003-DK931	20031222
	WO 2004056347	A3	20040812		
	W:				
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	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				
	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,				
	NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,				
	TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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	BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,				
	ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,				
	TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003291972	A1	20040714	AU 2003-291972	20031222
	EP 1585541	A2	20051019	EP 2003-767488	20031222
	EP 1585541	B1	20071114		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006516966	T	20060713	JP 2005-502527	20031222
	AT 378063	T	20071115	AT 2003-767488	20031222
	US 20050065066	A1	20050324	US 2004-825995	20040416
PRAI	DK 2002-1991	A	20021220		
	US 2003-439382P	P	20030110		
	WO 2003-DK931	W	20031222		

OS MARPAT 141:106476

L28 ANSWER 60 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:337507 CAPLUS  
DN 141:54222  
TI A new synthesis of 5-substituted-3-phenyl-2H-pyrano[2,3-b]quinolin-2-ones  
AU Kumar, N. Venkatesh; Subramani, B.; Rajendran, S. P.  
CS Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
SO Journal of the Indian Chemical Society (2003), 80(10), 918-920  
CODEN: JICSAH; ISSN: 0019-4522  
PB Indian Chemical Society  
DT Journal  
LA English  
OS CASREACT 141:54222  
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 58-60 IBIB ABS HITSTR

L28 ANSWER 58 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2004:565093 CAPLUS  
DOCUMENT NUMBER: 141:117166  
TITLE: Atropisomers of 3-substituted-4-arylquinolin-2-one  
derivatives for modulation of calcium-activated  
potassium channels  
INVENTOR(S): Vrudhula, Vivekananda M.; Gribkoff, Valentin Kala;  
Dasgupta, Bireshwar; Boissard, Christopher G.  
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA  
SOURCE: PCT Int. Appl., 44 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004058260	A1	20040715	WO 2003-US41548	20031218
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20040147749	A1	20040729	US 2003-739449	20031217
US 6939968	B2	20050906		
AU 2003300425	A1	20040722	AU 2003-300425	20031218
EP 1575589	A1	20050921	EP 2003-814399	20031218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
TR 200502440	T2	20051021	TR 2005-2440	20031218
BR 2003017679	A	20051129	BR 2003-17679	20031218
CN 1750821	A	20060322	CN 2003-80109833	20031218
JP 2006512378	T	20060413	JP 2004-562595	20031218
MX 2005PA06814	A	20050908	MX 2005-PA6814	20050621
ZA 2005005077	A	20060927	ZA 2005-5077	20050622
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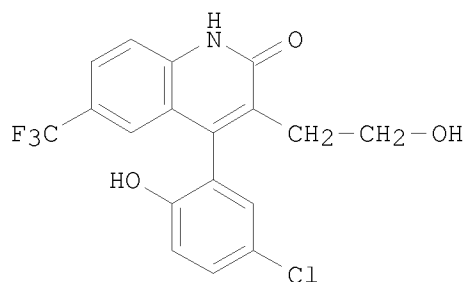
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PRIORITY APPLN. INFO.:

A 20070112  
MARPAT 141:117166

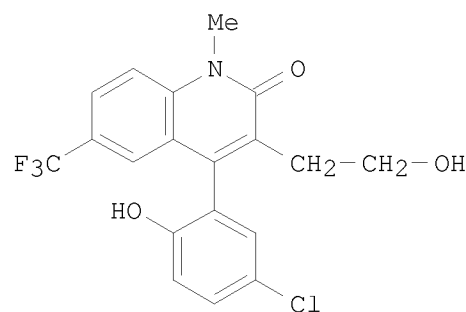
IN 2005-DN2882  
US 2002-436160P  
WO 2003-US41548

20050628  
P 20021223  
W 20031218

OTHER SOURCE(S):  
GI



I



II

AB Atropisomers of 3-substituted-4-arylquinolin-2-one derivs. I and II were prepared. The atropisomers can modulate the large conductance calcium-activated K<sup>+</sup> channels and are useful in the treatment of disorders which are responsive to the opening of the potassium channels. In addition, the atropisomers can be stable, i.e., do not interconvert, for periods of up to one month, or more. I and II significantly attenuates stress-induced colonic motility in rats.

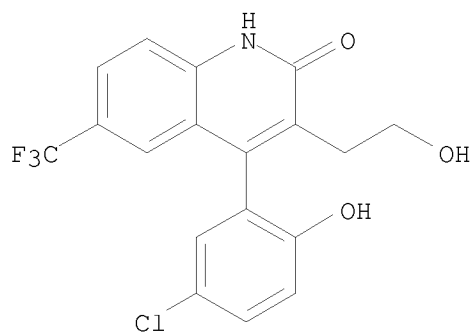
IT 722497-38-3P 722497-39-4P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)  
(atropisomers of 3-substituted-4-arylquinolin-2-one derivs. for modulation of calcium-activated potassium channels)

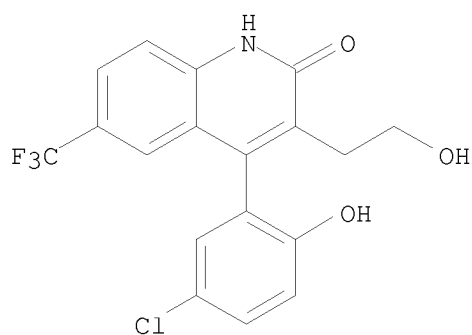
RN 722497-38-3 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)-, (-)- (CA INDEX NAME)

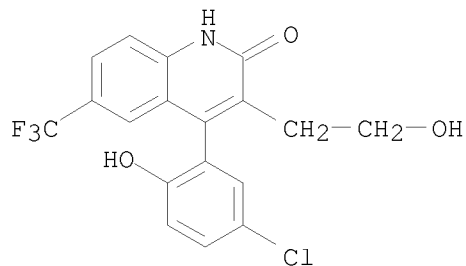




RN 722497-39-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)-, (+)- (CA INDEX NAME)

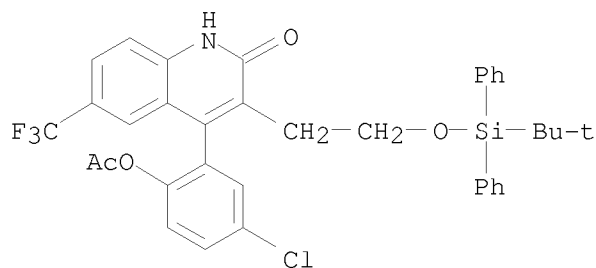


IT 275375-69-4P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (atropisomers of 3-substituted-4-arylquinolin-2-one derivs. for modulation of calcium-activated potassium channels)  
 RN 275375-69-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



IT 721918-21-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (atropisomers of 3-substituted-4-arylquinolin-2-one derivs. for modulation of calcium-activated potassium channels)  
 RN 721918-21-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4-[2-(acetyloxy)-5-chlorophenyl]-3-[2-[[[(1,1-

dimethylethyl)diphenylsilyl]oxy]ethyl]-6-(trifluoromethyl)- (CA INDEX NAME)



L28 ANSWER 59 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:550870 CAPLUS

DOCUMENT NUMBER: 141:106476

TITLE: Preparation of heterocyclic compounds as ligands for stabilizing insulin compositions

INVENTOR(S): Kaarsholm, Niels Christian; Madsen, Peter; Schlein, Morten; Olsen, Helle Birk; Havelund, Svend; Steensgaard, Dorte Bjerre; Ludvigsen, Svend; Jakobsen, Palle; Petersen, Anders Klarskov; Schluckebier, Gerd

PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.

SOURCE: PCT Int. Appl., 432 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004056347	A2	20040708	WO 2003-DK931	20031222
WO 2004056347	A3	20040812		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003291972	A1	20040714	AU 2003-291972	20031222
EP 1585541	A2	20051019	EP 2003-767488	20031222
EP 1585541	B1	20071114		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2006516966	T	20060713	JP 2005-502527	20031222
AT 378063	T	20071115	AT 2003-767488	20031222
US 20050065066	A1	20050324	US 2004-825995	20040416
PRIORITY APPLN. INFO.:			DK 2002-1991	A 20021220
			US 2003-439382P	P 20030110
			WO 2003-DK931	W 20031222

OTHER SOURCE(S): MARPAT 141:106476

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention provides pharmaceutical compns. comprising insulin and novel ligands for the His B10 Zn<sup>2+</sup> sites of the R-state insulin hexamer. The ligands belong to different subclasses of compds., e.g., benzotriazoles, 3-hydroxy-2-naphthoic acids, salicylic acids, tetrazoles, thiazolidinediones, 5-mercaptotetrazoles, or 4-cyano-1,2,3-triazoles. Methods for preparing the various classes of ligands included amidation, condensation, and coupling reactions. Compds. of the invention I-IX were evaluated for affinity to the zinc site with K<sub>d</sub> values ranging from 3-3,879 nM. Addnl., I-IX were evaluated for retention of fast absorption characteristics of formulations stabilized by addition of ligands and chemical stability of insulin formulations. The resulting preps. have improved phys. and chemical stability.

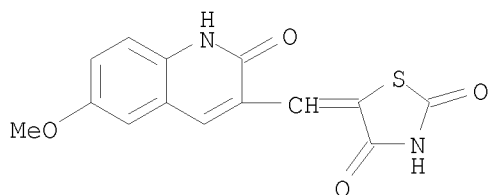
IT 503827-44-9P 503827-49-4P

RL: MOA (Modifier or additive use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic zinc-binding ligands for use as stabilizing agents for insulin compns.)

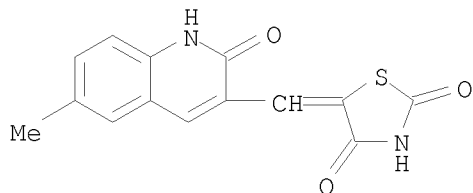
RN 503827-44-9 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



RN 503827-49-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



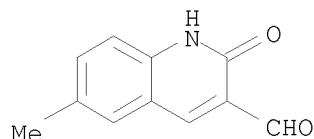
IT 101382-53-0 123990-78-3

RL: RCT (Reactant); RACT (Reactant or reagent)

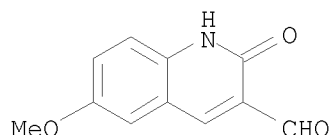
(preparation of heterocyclic zinc-binding ligands for use as stabilizing agents for insulin compns.)

RN 101382-53-0 CAPLUS

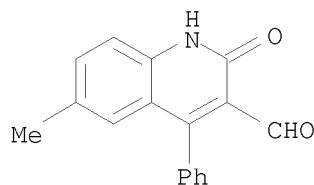
CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



RN 123990-78-3 CAPLUS  
CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



L28 ANSWER 60 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2004:337507 CAPLUS  
DOCUMENT NUMBER: 141:54222  
TITLE: A new synthesis of 5-substituted-3-phenyl-2H-pyrano[2,3-b]quinolin-2-ones  
AUTHOR(S): Kumar, N. Venkatesh; Subramani, B.; Rajendran, S. P.  
CORPORATE SOURCE: Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
SOURCE: Journal of the Indian Chemical Society (2003), 80(10), 918-920  
CODEN: JICSAH; ISSN: 0019-4522  
PUBLISHER: Indian Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 141:54222  
AB Synthesis of title compds. and derivs. is reported by the Perkin reaction of 3-formyl-4-phenyl/methyl-2-quinolones with sodium salt of phenylacetic acid. The 3-formyl-2-quinolones were obtained from 2-chloro-3-formyl-4-phenyl/methylquinolines which in turn were prepared from 2-chloro-4-phenyl/methyl-3-vinylquinolines.  
IT 709014-39-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of 5-substituted-3-phenyl-2H-pyrano[2,3-b]quinolin-2-ones)  
RN 709014-39-1 CAPLUS  
CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 61-65

L28 ANSWER 61 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:267327 CAPLUS

DN 140:287412

TI Preparation of piperazines as dopamine D2 and serotonin 5HT2A receptors inhibitors for the treatment of central nervous system disorders, in particular schizophrenia

IN Andreana, Tonja Lynn; Cho, Stephen Sung Yong; Graham, James Michael; Gregory, Tracy Fay; Howard, Harry Ralph, Jr.; Kornberg, Brian Edward; Nikam, Sham Shridhar; Pflum, Derek Andrew

PA Warner-Lambert Company LLC, USA

SO PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2004026864	A1	20040401	WO 2003-IB3902	20030905
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2499326	A1	20040401	CA 2003-2499326	20030905
	AU 2003263413	A1	20040408	AU 2003-263413	20030905
	EP 1546143	A1	20050629	EP 2003-797433	20030905
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003014393	A	20050719	BR 2003-14393	20030905
	CN 1701072	A	20051123	CN 2003-825236	20030905
	JP 2006503106	T	20060126	JP 2004-568902	20030905
	US 20040138230	A1	20040715	US 2003-660908	20030912
	MX 2005PA02007	A	20050428	MX 2005-PA2007	20050218
	ZA 2005002216	A	20050926	ZA 2005-2216	20050316
	NO 2005001826	A	20050415	NO 2005-1826	20050415
PRAI	US 2002-411475P	P	20020917		
	US 2002-416355P	P	20021004		
	WO 2003-IB3902	W	20030905		

OS MARPAT 140:287412

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 62 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:263268 CAPLUS

DN 141:22988

TI Chemoselective reduction of  $\alpha,\beta$ -unsaturated carbonyl compounds by sodium hydrogen telluride. Part I

AU Geethamalika, G.; Sundari, A. Suguna; Shanmugam, P.; Rajendran, S. P.

CS Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India

SO Indian Journal of Chemistry, Section B: Organic Chemistry Including

Medicinal Chemistry (2004), 43B(3), 674-676

CODEN: IJSBDB; ISSN: 0376-4699

PB National Institute of Science Communication

DT Journal

LA English

OS CASREACT 141:22988

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 63 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:258707 CAPLUS

DN 141:3226

TI Crystallographic Study of Inhibitors of tRNA-guanine Transglycosylase  
Suggests a New Structure-based Pharmacophore for Virtual Screening

AU Brenk, Ruth; Meyer, EmmanuelA.; Reuter, Klaus; Stubbs, Milton T.; Garcia,  
George A.; Diederich, Francois; Klebe, Gerhard

CS Institut fur Pharmazeutische Chemie, Philipps-Universitat Marburg,  
Marburg, 35032, Germany

SO Journal of Molecular Biology (2004), 338(1), 55-75  
CODEN: JMOBAK; ISSN: 0022-2836

PB Elsevier

DT Journal

LA English

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 64 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:928960 CAPLUS

DN 140:111260

TI Palladium-catalyzed carbonylative annulation of terminal alkynes:  
synthesis of coumarins and 2-quinolones

AU Kadnikov, Dmitry V.; Larock, Richard C.

CS Department of Chemistry, Iowa State University, Ames, IA, 50011, USA

SO Journal of Organometallic Chemistry (2003), 687(2), 425-435  
CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier Science B.V.

DT Journal

LA English

OS CASREACT 140:111260

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 65 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:796538 CAPLUS

DN 139:323440

TI Preparation of radiolabeled quinolines and quinolinones as metabotropic  
glutamate receptor mGluR1 antagonists for use in positron emission  
tomography.

IN Lesage, Anne Simone Josephine; Bischoff, Francois Paul; Janssen, Cornelus  
Gerardus Maria; Lavreysen, Hilde

PA Janssen Pharmaceutica N.V., Belg.

SO PCT Int. Appl., 148 pp.  
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2003082350	A2	20031009	WO 2003-EP3240	20030326
	WO 2003082350	A3	20040304		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,				

	KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
CA 2479109	A1	20031009	CA 2003-2479109 20030326
AU 2003226737	A1	20031013	AU 2003-226737 20030326
BR 2003008945	A	20050104	BR 2003-8945 20030326
EP 1492571	A2	20050105	EP 2003-745282 20030326
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK		
CN 1642580	A	20050720	CN 2003-807387 20030326
JP 2005524679	T	20050818	JP 2003-579882 20030326
NZ 535438	A	20060831	NZ 2003-535438 20030326
IN 2004DN02631	A	20050401	IN 2004-DN2631 20040908
US 20060083676	A1	20060420	US 2004-509069 20040924
MX 2004PA09435	A	20050125	MX 2004-PA9435 20040928
ZA 2004007820	A	20051011	ZA 2004-7820 20040928
NO 2004004635	A	20041027	NO 2004-4635 20041027
PRAI EP 2002-76254	A	20020329	
WO 2003-EP3240	W	20030326	
OS	MARPAT 139:323440		

=> D L28 61 IBIB ABS HITSTR

L28 ANSWER 61 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:267327 CAPLUS

DOCUMENT NUMBER: 140:287412

TITLE: Preparation of piperazines as dopamine D2 and serotonin 5HT2A receptors inhibitors for the treatment of central nervous system disorders, in particular schizophrenia

INVENTOR(S): Andreana, Tonja Lynn; Cho, Stephen Sung Yong; Graham, James Michael; Gregory, Tracy Fay; Howard, Harry Ralph, Jr.; Kornberg, Brian Edward; Nikam, Sham Shridhar; Pflum, Derek Andrew

PATENT ASSIGNEE(S): Warner-Lambert Company LLC, USA

SOURCE: PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004026864	A1	20040401	WO 2003-IB3902	20030905
W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	
RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
CA 2499326	A1	20040401	CA 2003-2499326	20030905
AU 2003263413	A1	20040408	AU 2003-263413	20030905
EP 1546143	A1	20050629	EP 2003-797433	20030905
R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK	
BR 2003014393	A	20050719	BR 2003-14393	20030905

CN 1701072	A	20051123	CN 2003-825236	20030905
JP 2006503106	T	20060126	JP 2004-568902	20030905
US 20040138230	A1	20040715	US 2003-660908	20030912
MX 2005PA02007	A	20050428	MX 2005-PA2007	20050218
ZA 2005002216	A	20050926	ZA 2005-2216	20050316
NO 2005001826	A	20050415	NO 2005-1826	20050415
PRIORITY APPLN. INFO.:			US 2002-411475P	P 20020917
			US 2002-416355P	P 20021004
			WO 2003-IB3902	W 20030905
OTHER SOURCE(S):			MARPAT 140:287412	
GI				

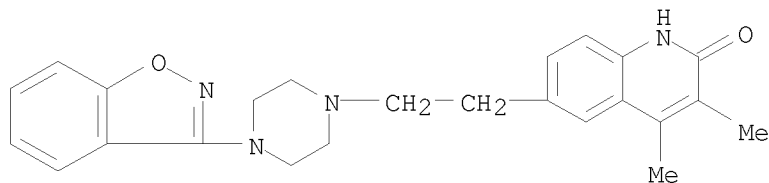
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein X =S, O, SO, SO<sub>2</sub>, CH<sub>2</sub>, NH and derivs.; Y, Z = independently N or CH; A = (CH<sub>2</sub>)<sub>m</sub>CH<sub>2</sub>, (CH<sub>2</sub>)<sub>m</sub>O, (CH<sub>2</sub>)<sub>m</sub>NR<sub>9</sub>, (CH<sub>2</sub>)<sub>m</sub>C(R<sub>7</sub>R<sub>8</sub>); R<sub>7</sub>, R<sub>8</sub> = independently (un)substituted alkyl, alkoxy, or CR<sub>7</sub>R<sub>8</sub> = carbonyl; m = 1-4; R<sub>4</sub>, R<sub>5</sub> = independently H, (un)substituted alkyl, alkoxy, or when X = NR<sub>6</sub> and derivs., CR<sub>4</sub>R<sub>5</sub>R<sub>6</sub>N = 4-7 membered heterocyclcyl ring, with the proviso that when R<sub>9</sub>R<sub>4</sub> or R<sub>9</sub>R<sub>5</sub> = a ring, the other of R<sub>4</sub> and R<sub>5</sub> is absent; R<sub>9</sub> = H, (un)substituted alkyl, alkoxy; R<sub>6</sub> = H, (un)substituted alkyl, alkoxy; R<sub>1</sub> = H, (un)substituted alkyl; R<sub>2</sub>, R<sub>3</sub> = independently H, halo, hetero/aryl, (un)substituted aryl/heteroarylalkyl, alkoxy, etc.; V, W = independently CH<sub>2</sub> and derivs. or CH and derivs.; and their pharmaceutically acceptable salts] were prepared s dopamine D<sub>2</sub> and serotonin 5HT<sub>2A</sub> receptors inhibitors for treating central nervous system disorders, in particular schizophrenia (no data). For example, II•MeSO<sub>3</sub>H was prepared by acylation of 3-chloro-2-methylaniline with 3,3-diethylacryloyl chloride, one-pot Friedel-Craft alkylation with chloroacetyl chloride and cyclization in the presence of AlCl<sub>3</sub> to chloroacetylquinoline intermediate, reduction to chloroethylquinoline III, alkylation of 3-(piperazin-1-yl)benzo[d]isothiazole hydrochloride with III, followed by salt formation of II with methanesulfonic acid. II acted as dopamine D<sub>2</sub> and serotonin 5HT<sub>2A</sub> receptors inhibitors with a K<sub>i</sub> value of 0.9 nm and 1 nM, resp. Thus, I and their formulations are useful for treating central nervous system disorders, in particular schizophrenia and depression.

IT 676115-82-5P 676117-11-6P, 6-[2-[4-(Benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one  
 RL: CRT (Combinatorial reactant); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (drug candidate; preparation of piperazines for treating of central nervous system disorders, in particular schizophrenia)

RN 676115-82-5 CAPLUS

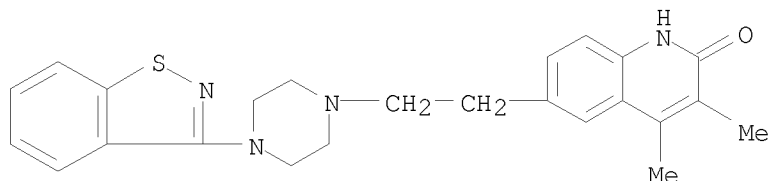
CN 2(1H)-Quinolinone, 6-[2-[4-(1,2-benzisoxazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



RN 676117-11-6 CAPLUS



CN 2(1H)-Quinolinone, 6-[2-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)

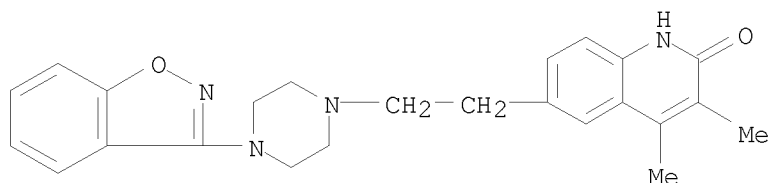


IT 676115-79-0P 676117-14-9P, 6-[2-[4-(Benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3-ethyl-4-methyl-1H-quinolin-2-one  
 676117-98-9P, 6-[2-[4-(5-Fluoro-benzo[d]isoxazol-3-yl)piperazin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one 676117-99-0P,  
 6-[2-[4-(6-Fluoro-benzo[d]isoxazol-3-yl)piperazin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one 676118-01-7P, 6-[2-[4-(5-Chloro-benzo[d]isoxazol-3-yl)piperazin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one  
 676118-02-8P, 6-[2-[4-(5-Methoxy-benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one 676118-03-9P,  
 6-[2-[4-(7-Fluoro-benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one 676118-05-1P, 6-[2-[4-(6-Fluoro-benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one 676118-06-2P, 6-[2-[4-(5-Fluoro-benzo[d]isothiazol-3-yl)piperazin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one  
 676118-07-3P, 6-[2-[4-(6-Fluoro-benzo[d]isothiazol-3-yl)piperidin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one 676118-08-4P,  
 6-[2-[4-(6-Fluoro-benzo[d]isoxazol-3-yl)piperidin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one 676118-09-5P, 6-[2-[4-(1H-Indazol-3-yl)-piperazin-1-yl]ethyl]-3,4-dimethyl-1H-quinolin-2-one  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of piperazines for treating of central nervous system disorders, in particular schizophrenia)

RN 676115-79-0 CAPLUS

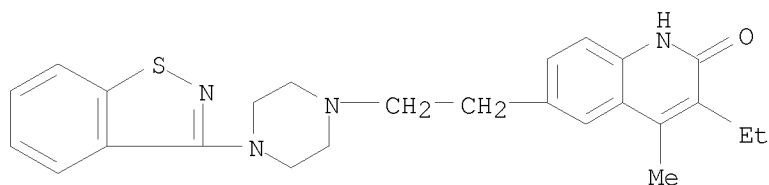
CN 2(1H)-Quinolinone, 6-[2-[4-(1,2-benzisoxazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

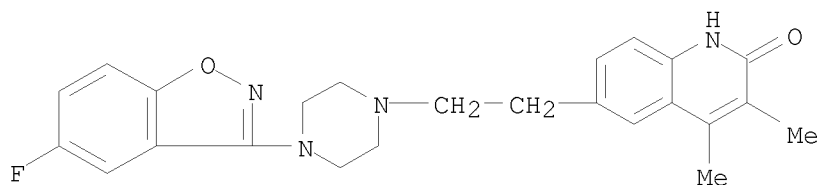
RN 676117-14-9 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-3-ethyl-4-methyl- (CA INDEX NAME)



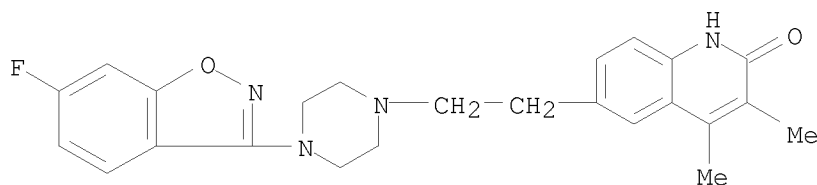
RN 676117-98-9 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(5-fluoro-1,2-benzisoxazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



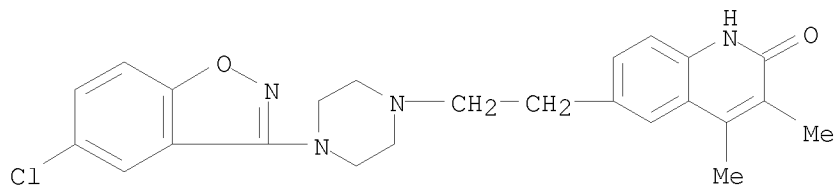
RN 676117-99-0 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



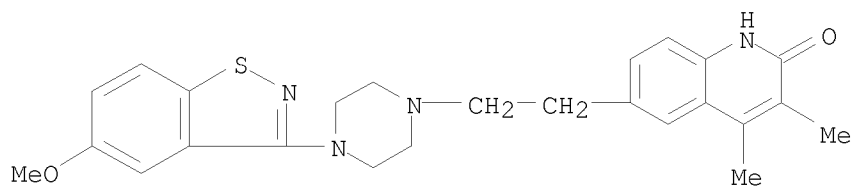
RN 676118-01-7 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(5-chloro-1,2-benzisoxazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



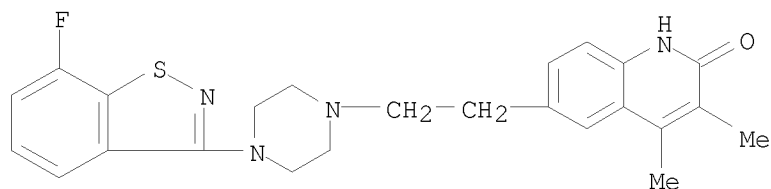
RN 676118-02-8 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(5-methoxy-1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



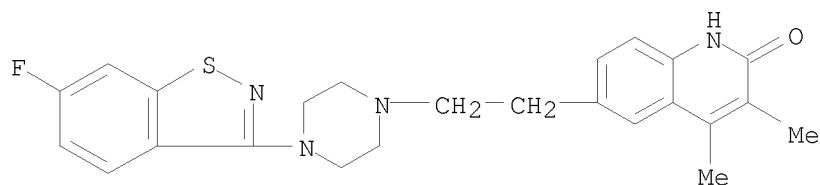
RN 676118-03-9 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(7-fluoro-1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



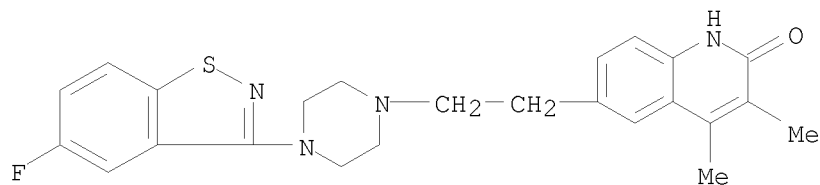
RN 676118-05-1 CAPLUS

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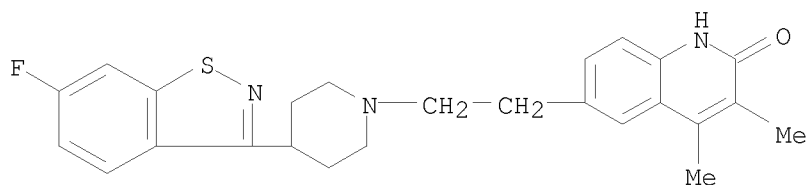
RN 676118-06-2 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(5-fluoro-1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



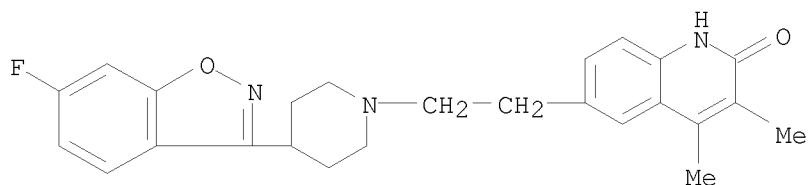
RN 676118-07-3 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(6-fluoro-1,2-benzisothiazol-3-yl)-1-piperidinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



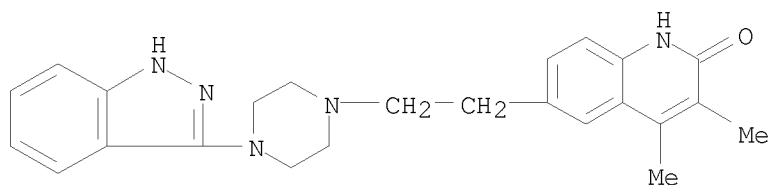
RN 676118-08-4 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



RN 676118-09-5 CAPLUS

CN 2(1H)-Quinolinone, 6-[2-[4-(1H-indazol-3-yl)-1-piperazinyl]ethyl]-3,4-dimethyl- (CA INDEX NAME)



IT 676115-80-3P, 6-(2-Chloroacetyl)-3,4-dimethyl-1H-quinolin-2-one

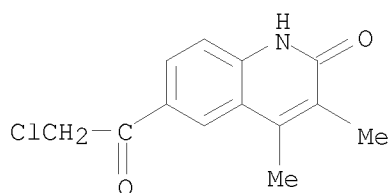
676115-81-4P, 6-(2-Chloroethyl)-3,4-dimethyl-1H-quinolin-2-one

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of piperazines for treating of central nervous system disorders, in particular schizophrenia)

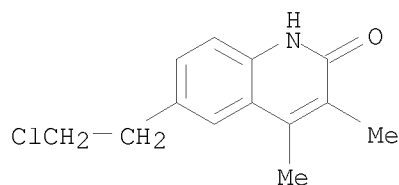
RN 676115-80-3 CAPLUS

CN 2(1H)-Quinolinone, 6-(chloroacetyl)-3,4-dimethyl- (9CI) (CA INDEX NAME)



RN 676115-81-4 CAPLUS

CN 2(1H)-Quinolinone, 6-(2-chloroethyl)-3,4-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L28 64-65 IBIB ABS HITSTR

L28 ANSWER 64 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:928960 CAPLUS

DOCUMENT NUMBER: 140:111260

TITLE: Palladium-catalyzed carbonylative annulation of terminal alkynes: synthesis of coumarins and 2-quinolones

AUTHOR(S): Kadnikov, Dmitry V.; Larock, Richard C.

CORPORATE SOURCE: Department of Chemistry, Iowa State University, Ames, IA, 50011, USA

SOURCE: Journal of Organometallic Chemistry (2003), 687(2), 425-435

CODEN: JORCAI; ISSN: 0022-328X

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:111260

AB O-Iodophenols and o-iodoaniline derivs. react with terminal alkynes under 1 atm of CO in the presence of pyridine and catalytic amts. of Pd(OAc)<sub>2</sub> to generate coumarins and 2-quinolones, resp., as the only products. Terminal alkynes bearing alkyl, aryl, silyl, hydroxyl, ester and cyano substituents are effective in these processes affording the desired products in moderate yields. The formation of coumarins and 2-quinolones in this process is in Stark contrast with all previously described Pd-catalyzed reactions of o-iodophenols or o-iodoanilines with terminal alkynes and CO, which have afforded chromones and 4-quinolones. Also, under the authors' reaction conditions terminal alkynes insert into the C-Pd bond instead of undergoing a Sonogashira-type coupling as confirmed by an isotope labeling experiment

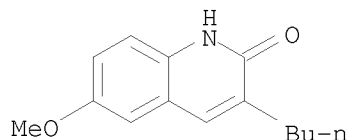
IT 647836-49-5P, 3-(Butyl)-6-methoxy-2-quinolone

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of coumarins and quinolinones by carbonylative annulation of terminal alkynes with iodophenols and iodoanilines)

RN 647836-49-5 CAPLUS

CN 2(1H)-Quinolinone, 3-butyl-6-methoxy- (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 65 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:796538 CAPLUS

DOCUMENT NUMBER: 139:323440

TITLE: Preparation of radiolabeled quinolines and quinolinones as metabotropic glutamate receptor mGluR1 antagonists for use in positron emission tomography.

INVENTOR(S): Lesage, Anne Simone Josephine; Bischoff, Francois Paul; Janssen, Cornelus Gerardus Maria; Lavreysen, Hilde

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 148 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

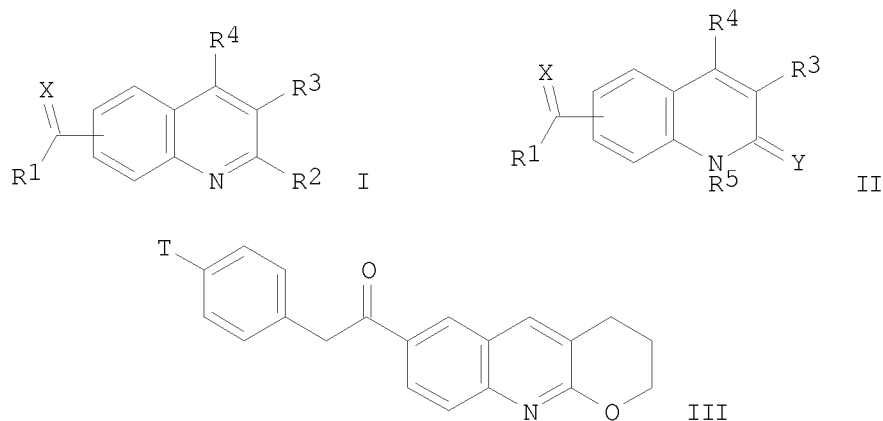
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003082350	A2	20031009	WO 2003-EP3240	20030326
WO 2003082350	A3	20040304		
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CA 2479109	A1	20031009	CA 2003-2479109	20030326
AU 2003226737	A1	20031013	AU 2003-226737	20030326
BR 2003008945	A	20050104	BR 2003-8945	20030326
EP 1492571	A2	20050105	EP 2003-745282	20030326
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CN 1642580	A	20050720	CN 2003-807387	20030326
JP 2005524679	T	20050818	JP 2003-579882	20030326
NZ 535438	A	20060831	NZ 2003-535438	20030326
IN 2004DN02631	A	20050401	IN 2004-DN2631	20040908
US 20060083676	A1	20060420	US 2004-509069	20040924
MX 2004PA09435	A	20050125	MX 2004-PA9435	20040928
ZA 2004007820	A	20051011	ZA 2004-7820	20040928
NO 2004004635	A	20041027	NO 2004-4635	20041027
PRIORITY APPLN. INFO.:			EP 2002-76254	A 20020329
			WO 2003-EP3240	W 20030326

OTHER SOURCE(S): MARPAT 139:323440

GI



AB Radiolabeled title compds. [I, II; X = O, S, C(R6)2, NR7; Y = O, S; R1 = (substituted) alkyl, cycloalkyl, cycloalkylalkyl, thienyl, quinolinyl, etc.; R2 = H, halo, cyano, alkyl, amino, heterocyclyl, etc.; R3, R4 = H, halo, OH, cyano, alkyl, alkoxy, etc.; R2R3 = (CH2)3-6, Z4CH2CH2CH2, Z4CH2CH2, etc.; Z4 = O, S, SO2, NR11; R11 = H, alkyl, PhCH2, alkoxy carbonyl; R3R4 = (CH2)4, CH:CHCH:CH; R5 = H, cycloalkyl, piperidinyl, oxothienyl, tetrahydrothienyl, aralkyl, alkoxyalkyl, etc.; R6 = H, aryl, alkyl, aminoalkyl; R7 = amino, OH], were prepared. Most preferred are radiolabeled compds. in which the radioactive isotope is selected from 3H, 11C and 18F. The invention also relates to their use in a diagnostic method, in particular for marking and identifying a mGluR1 receptor in biol. material, as well as to their use for imaging an organ, in particular using positron emission tomog. (PET). Thus, title compound (III) was prepared by tritiation of the corresponding bromide in THF using tritium gas and Pd/C catalyst. The purified product showed specific activity of 25 Ci/mmol.

IT 409340-69-8P 409340-70-1P 409340-98-3P  
 409341-14-6P 409344-31-6P 409344-32-7P  
 409344-33-8P 409344-34-9P 409344-35-0P  
 409344-36-1P 409344-37-2P 409344-38-3P  
 409344-39-4P 409344-41-8P 409344-42-9P  
 409344-43-0P 409344-44-1P 409344-45-2P  
 409344-47-4P 409344-48-5P 409344-50-9P  
 409344-52-1P 409344-54-3P 409344-56-5P  
 409344-58-7P 409344-60-1P 409344-62-3P  
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 409344-70-3P 409344-72-5P 409344-79-2P  
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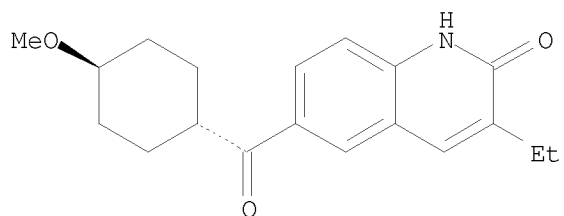
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of radiolabeled quinolines and quinolinones as metabotropic glutamate receptor mGluR1 antagonists for use in positron emission tomog.)

RN 409340-69-8 CAPLUS

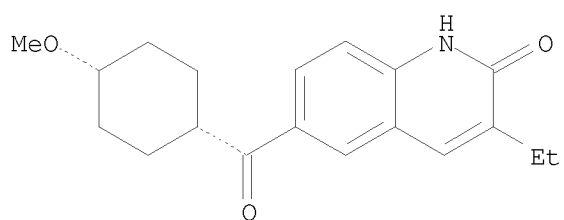
CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.



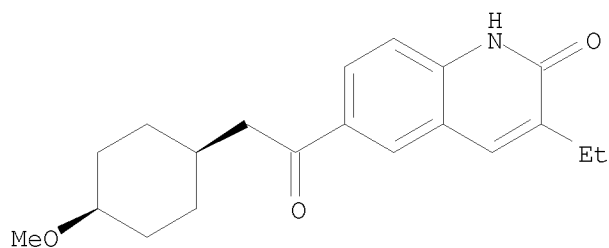
RN 409340-70-1 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

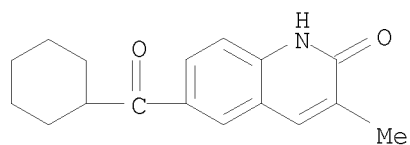


RN 409340-98-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)acetyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

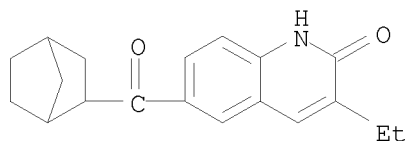


RN 409341-14-6 CAPLUS  
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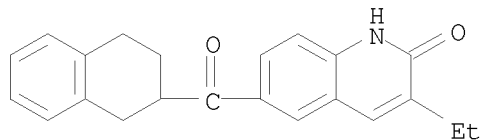
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 CN 2(1H)-Quinolinone, 6-(bicyclo[2.2.1]hept-2-ylcarbonyl)-3-ethyl- (CA INDEX NAME)





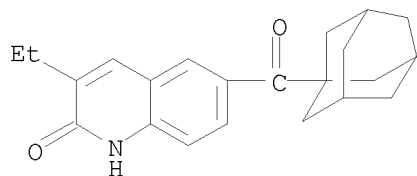
RN 409344-32-7 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(1,2,3,4-tetrahydro-2-naphthalenyl)carbonyl]-  
(CA INDEX NAME)



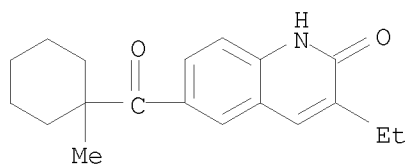
RN 409344-33-8 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.1.3,7]dec-1-ylcarbonyl)- (CA  
INDEX NAME)



RN 409344-34-9 CAPLUS

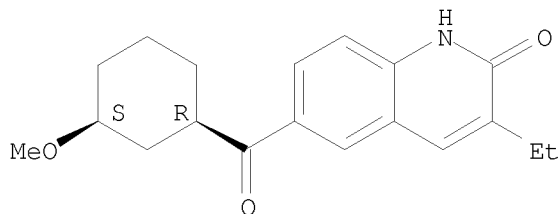
CN 2(1H)-Quinolinone, 3-ethyl-6-[(1-methylcyclohexyl)carbonyl]- (CA INDEX  
NAME)



RN 409344-35-0 CAPLUS

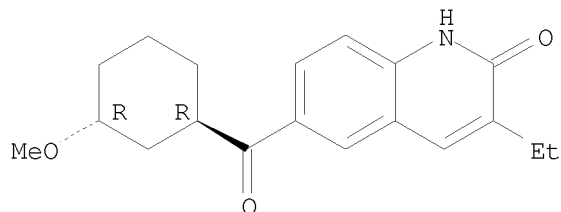
CN 2(1H)-Quinolinone, 3-ethyl-6-[[ (1R,3S)-3-methoxycyclohexyl]carbonyl]-,  
rel- (CA INDEX NAME)

Relative stereochemistry.

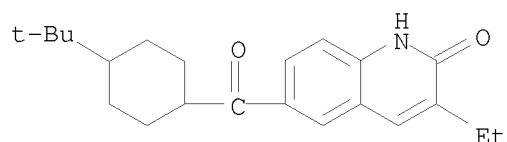


RN 409344-36-1 CAPLUS  
CN 2(1H)-Quinolinone, 3-ethyl-6-[[ (1R,3R)-3-methoxycyclohexyl]carbonyl]-,  
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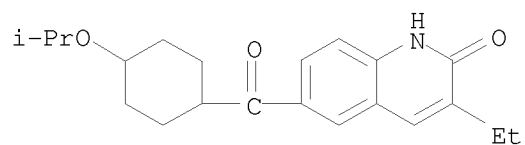
Relative stereochemistry.



RN 409344-37-2 CAPLUS  
CN 2(1H)-Quinolinone, 6-[[4-(1,1-dimethylethyl)cyclohexyl]carbonyl]-3-ethyl-  
(CA INDEX NAME)

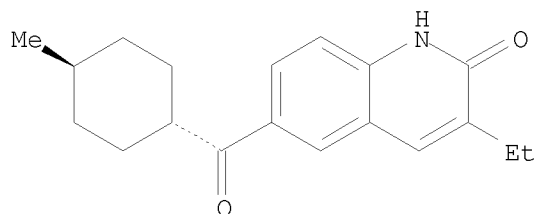


RN 409344-38-3 CAPLUS  
CN 2(1H)-Quinolinone, 3-ethyl-6-[[4-(1-methylethoxy)cyclohexyl]carbonyl]-  
(CA INDEX NAME)

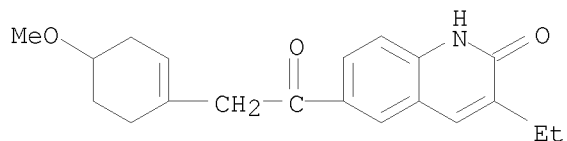


RN 409344-39-4 CAPLUS  
CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methylcyclohexyl)carbonyl]- (CA  
INDEX NAME)

Relative stereochemistry.

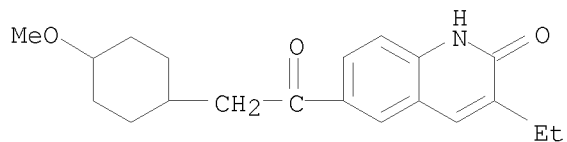


RN 409344-41-8 CAPLUS  
CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxy-1-cyclohexen-1-yl)acetyl]- (9CI)  
(CA INDEX NAME)



RN 409344-42-9 CAPLUS

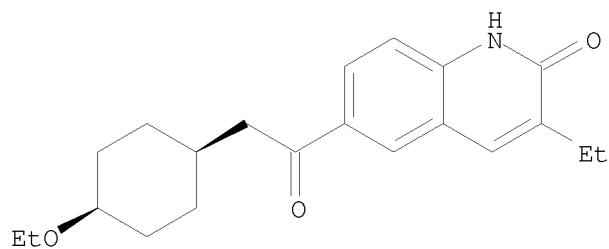
CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxycyclohexyl)acetyl]- (9CI) (CA INDEX NAME)



RN 409344-43-0 CAPLUS

CN 2(1H)-Quinolinone, 6-[(cis-4-ethoxycyclohexyl)acetyl]-3-ethyl- (9CI) (CA INDEX NAME)

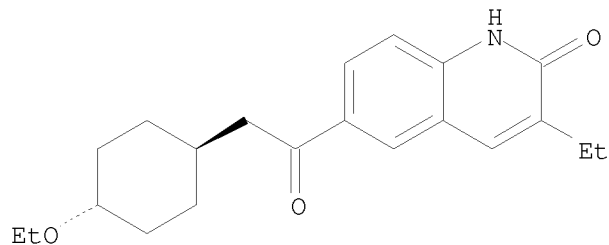
Relative stereochemistry.



RN 409344-44-1 CAPLUS

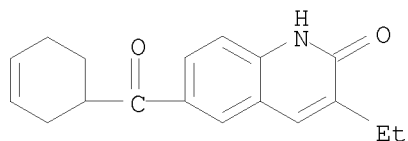
CN 2(1H)-Quinolinone, 6-[(trans-4-ethoxycyclohexyl)acetyl]-3-ethyl- (9CI) (CA INDEX NAME)

Relative stereochemistry.

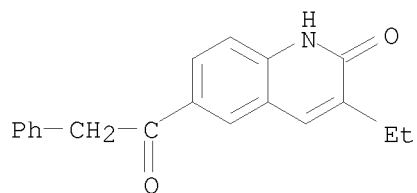


RN 409344-45-2 CAPLUS

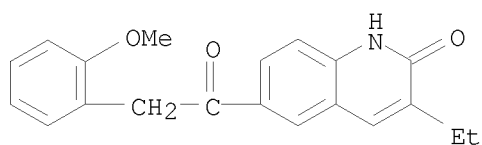
CN 2(1H)-Quinolinone, 6-(3-cyclohexen-1-ylcarbonyl)-3-ethyl- (CA INDEX NAME)



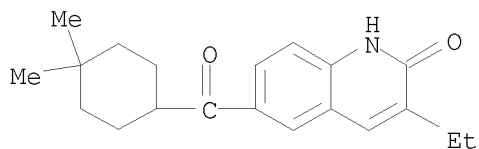
RN 409344-47-4 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-(phenylacetyl)- (9CI) (CA INDEX NAME)



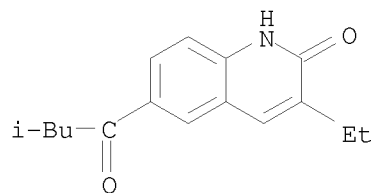
RN 409344-48-5 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(2-methoxyphenyl)acetyl]- (9CI) (CA INDEX NAME)



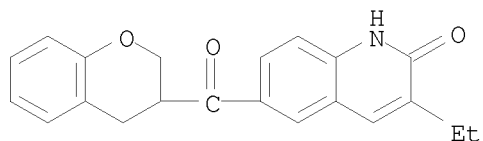
RN 409344-50-9 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(4,4-dimethylcyclohexyl)carbonyl]-3-ethyl- (CA INDEX NAME)



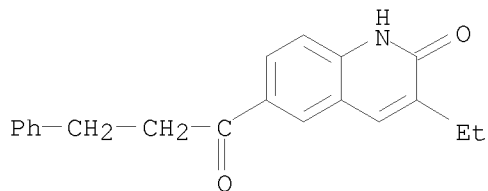
RN 409344-52-1 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-(3-methyl-1-oxobutyl)- (CA INDEX NAME)



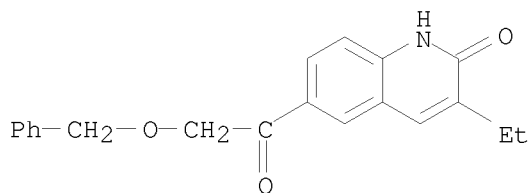
RN 409344-54-3 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(3,4-dihydro-2H-1-benzopyran-3-yl)carbonyl]-3-ethyl- (CA INDEX NAME)



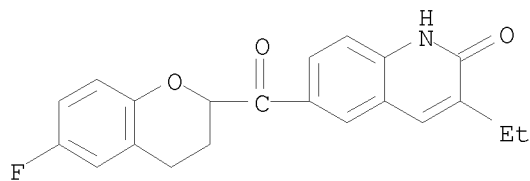
RN 409344-56-5 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-(1-oxo-3-phenylpropyl)- (CA INDEX NAME)



RN 409344-58-7 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(phenylmethoxy)acetyl]- (9CI) (CA INDEX NAME)

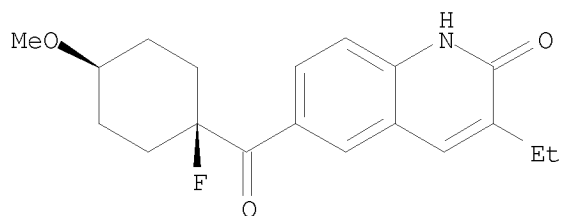


RN 409344-60-1 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(6-fluoro-3,4-dihydro-2H-1-benzopyran-2-yl)carbonyl]- (CA INDEX NAME)



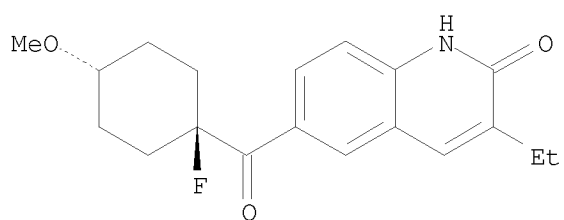
RN 409344-62-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-1-fluoro-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

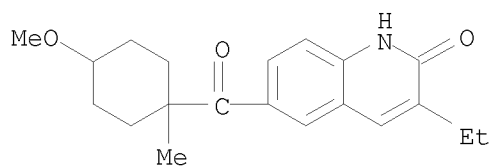


RN 409344-64-5 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-1-fluoro-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

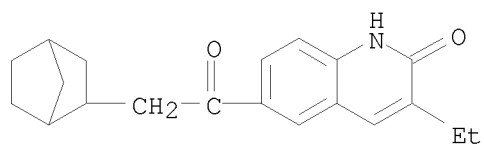
Relative stereochemistry.



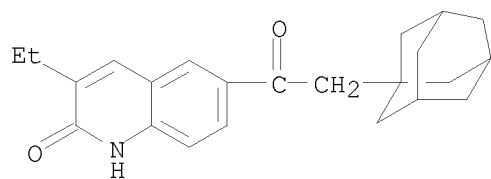
RN 409344-66-7 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxy-1-methylcyclohexyl)carbonyl]- (CA INDEX NAME)



RN 409344-68-9 CAPLUS  
 CN 2(1H)-Quinolinone, 6-(bicyclo[2.2.1]hept-2-ylacetyl)-3-ethyl- (9CI) (CA INDEX NAME)

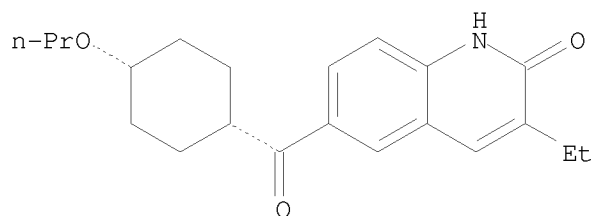


RN 409344-70-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylacetyl)- (9CI) (CA INDEX NAME)



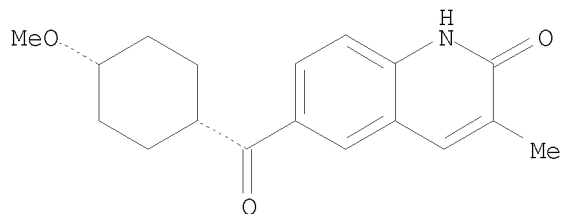
RN 409344-72-5 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-propoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.



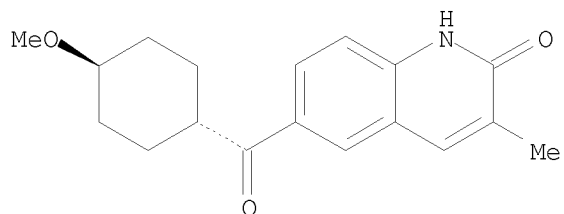
RN 409344-79-2 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(cis-4-methoxycyclohexyl)carbonyl]-3-methyl- (CA INDEX NAME)

Relative stereochemistry.

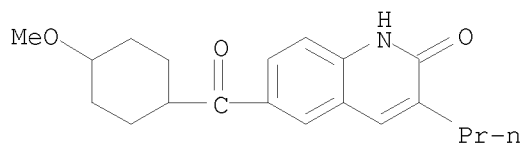


RN 409344-81-6 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(trans-4-methoxycyclohexyl)carbonyl]-3-methyl- (CA INDEX NAME)

Relative stereochemistry.

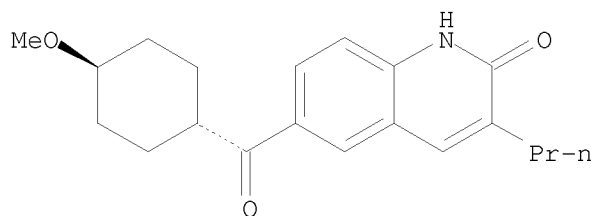


RN 409344-83-8 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-propyl- (CA INDEX NAME)



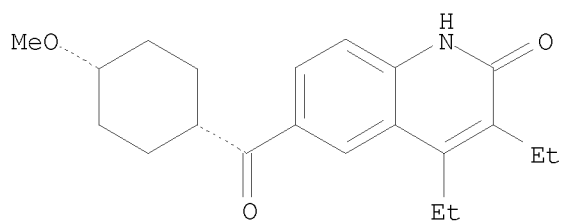
RN 409344-85-0 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(trans-4-methoxycyclohexyl)carbonyl]-3-propyl- (CA INDEX NAME)

Relative stereochemistry.



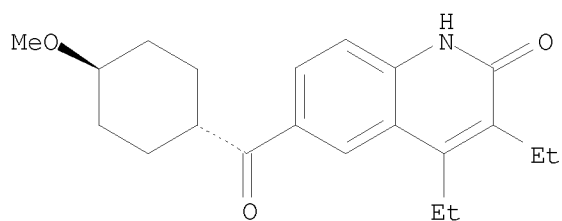
RN 409344-89-4 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-diethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.



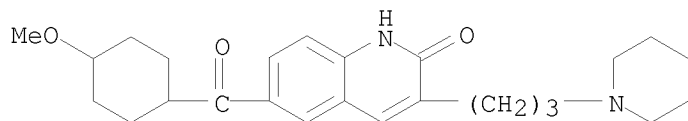
RN 409344-91-8 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-diethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

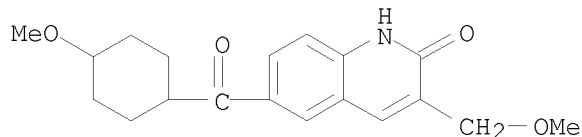


RN 409345-13-7 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-[3-(1-piperidinyl)propyl]- (CA INDEX NAME)





RN 409345-14-8 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-(methoxymethyl)-  
 (CA INDEX NAME)



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L28 ANSWER 66 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:474114 CAPLUS

DOCUMENT NUMBER: 139:395891

TITLE: Synthesis and evaluation of antibacterial activities of hydrazones of 6-nitro-1,4-quinoxaline derivatives  
 AUTHOR(S): Khan, Suroor A.; Siddiqui, Anees A.; Rehman, Zia Ur  
 CORPORATE SOURCE: Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Jamia Hamdard, New Delhi, 110 062, India  
 SOURCE: Oriental Journal of Chemistry (2003), 19(1), 237-238  
 CODEN: OJCHEG; ISSN: 0970-020X

PUBLISHER: Oriental Scientific Publishing Co.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:395891

AB Hydrazones of 6-nitro-1,4-quinoxaline derivs. are synthesized by condensing substituted quinoxalines and hydrazine hydrate, followed by reaction with resp. aldehydes. These are characterized on the basis of IR, NMR and mass spectral data. The final compds. were evaluated for antibacterial activity by taking Staphylococcus aureus as test organism.

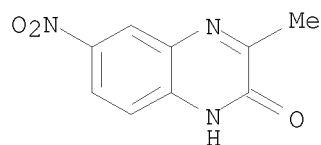
IT 19801-10-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and evaluation of antibacterial activities of hydrazones of 6-nitro-1,4-quinoxaline derivs.)

RN 19801-10-6 CAPLUS

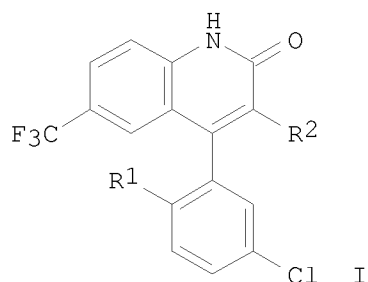
CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)



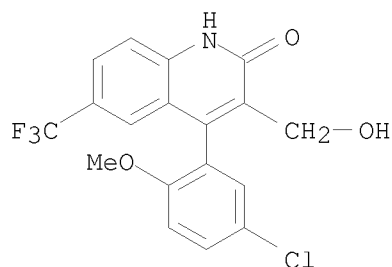
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 67 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:410902 CAPLUS  
 DOCUMENT NUMBER: 139:133450  
 TITLE: 4-Aryl-3-(hydroxyalkyl)quinolin-2-ones: Novel Maxi-K Channel Opening Relaxants of Corporal Smooth Muscle Targeted for Erectile Dysfunction  
 AUTHOR(S): Hewawasam, Piyasena; Fan, Wenhong; Ding, Min; Flint, Kim; Cook, Deborah; Goggins, Gregory D.; Myers, Robert A.; Gribkoff, Valentin K.; Boissard, Christopher G.; Dworetzky, Steven I.; Starrett, John E., Jr.; Lodge, Nicholas J.  
 CORPORATE SOURCE: Departments of Chemistry and Neuroscience/Genitourinary Drug Discovery, Bristol-Myers Squibb Pharmaceutical Research Institute, Wallingford, CT, 06492, USA  
 SOURCE: Journal of Medicinal Chemistry (2003), 46(14), 2819-2822  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 139:133450  
 GI



AB Novel 4-aryl-3-(hydroxyalkyl)quinoline-2-ones I [R1 = HO, MeO; R2 = HO(CH2)<sub>n</sub>, n = 1 - 3; R2 = (E)-HOCH2CH:CH] were prepared and evaluated as openers of the cloned maxi-K channel hSlo expressed in *Xenopus laevis* oocytes by utilizing electrophysiol. methods. The effect of these maxi-K openers on corporal smooth muscle was studied in vitro using isolated rabbit corpus cavernosum. A potent maxi-K opener was identified as an effective relaxant of rabbit corporal smooth muscle and shown to be active in an in vivo animal model of male erectile function.  
 IT 275375-51-4P  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of aryl(hydroxyalkyl)quinolinones as maxi-K channel opening relaxants of corporal smooth muscle targeted for erectile dysfunction)  
 RN 275375-51-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-(hydroxymethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



IT 275375-55-8P 275375-57-0P 275375-58-1P  
 275375-61-6P 275375-64-9P 275375-69-4P  
 275375-70-7P

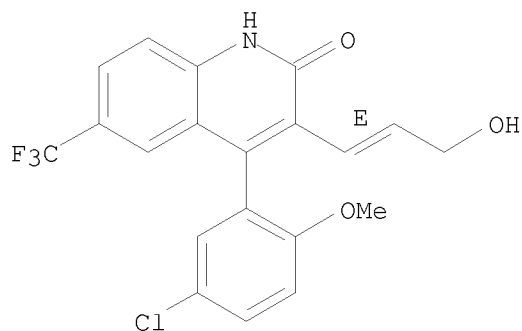
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation)

(preparation of aryl(hydroxyalkyl)quinolinones as maxi-K channel opening  
 relaxants of corporal smooth muscle targeted for erectile dysfunction)

RN 275375-55-8 CAPLUS

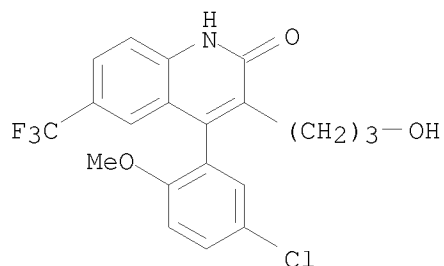
CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-[(1E)-3-hydroxy-1-  
 propenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



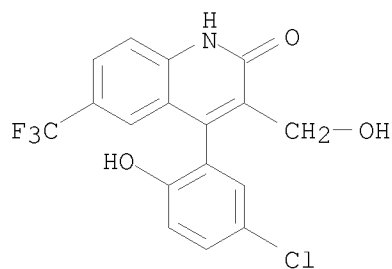
RN 275375-57-0 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-(3-hydroxypropyl)-6-  
 (trifluoromethyl)- (CA INDEX NAME)



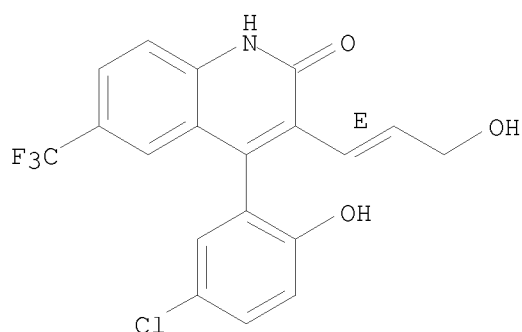
RN 275375-58-1 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(hydroxymethyl)-6-  
 (trifluoromethyl)- (CA INDEX NAME)

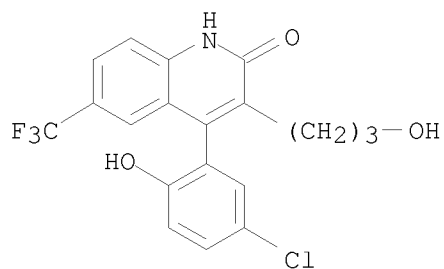


RN 275375-61-6 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-[(1E)-3-hydroxy-1-propenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

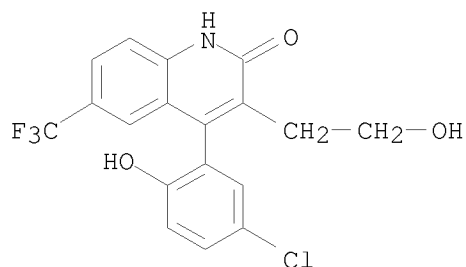
Double bond geometry as shown.



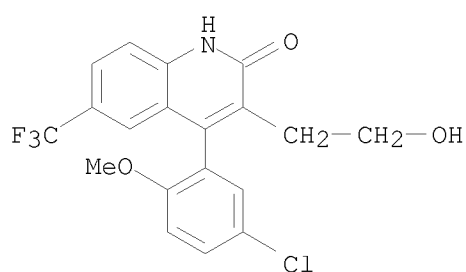
RN 275375-64-9 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(3-hydroxypropyl)-6-(trifluoromethyl)- (CA INDEX NAME)



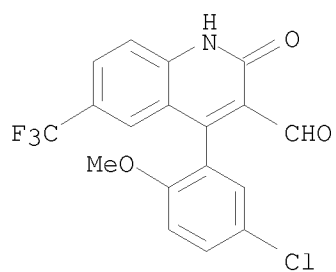
RN 275375-69-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-70-7 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)

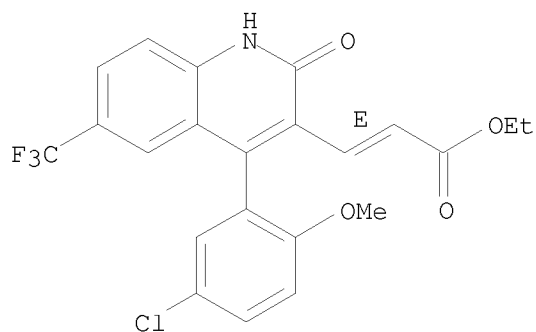


IT 275375-53-6P 275375-54-7P 275375-59-2P  
 275375-63-8P 275376-03-9P 568565-36-6P  
 568565-37-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of aryl(hydroxyalkyl)quinolinones as maxi-K channel opening relaxants of corporal smooth muscle targeted for erectile dysfunction)  
 RN 275375-53-6 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-54-7 CAPLUS  
 CN 2-Propenoic acid, 3-[4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-3-quinolinyl]-, ethyl ester, (2E)- (CA INDEX NAME)

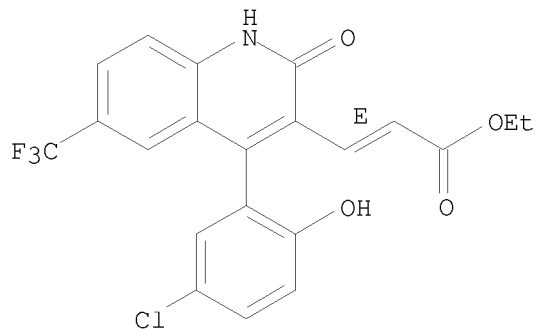
Double bond geometry as shown.



RN 275375-59-2 CAPLUS

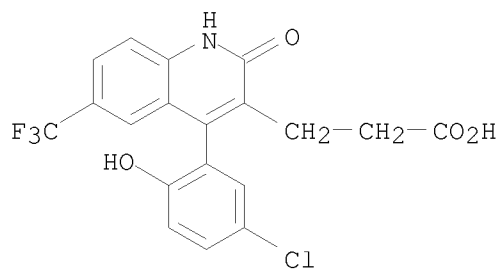
CN 2-Propenoic acid, 3-[4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-3-quinolinyl]-, ethyl ester, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



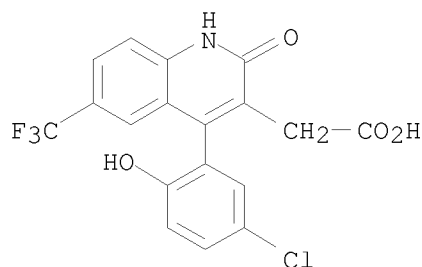
RN 275375-63-8 CAPLUS

CN 3-Quinolinepropanoic acid, 4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)

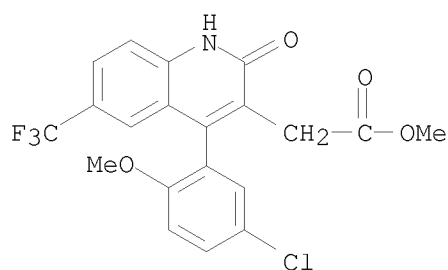


RN 275376-03-9 CAPLUS

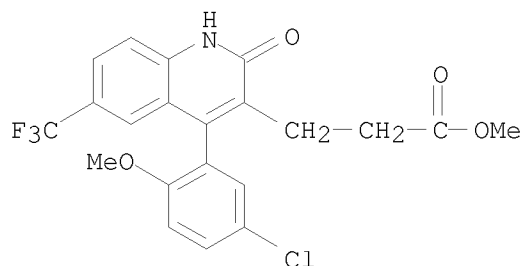
CN 3-Quinolineacetic acid, 4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)



RN 568565-36-6 CAPLUS  
 CN 3-Quinolineacetic acid, 4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



RN 568565-37-7 CAPLUS  
 CN 3-Quinolinepropanoic acid, 4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 68 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:345338 CAPLUS

DOCUMENT NUMBER: 139:230597

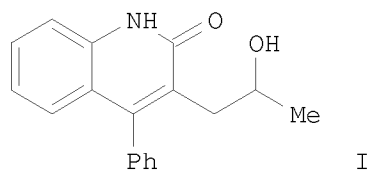
TITLE: A mild and efficient synthesis of 4-aryl-quinolin-2(1H)-ones via a tandem amidation/Knoevenagel condensation of 2-amino-benzophenones with esters or lactones

AUTHOR(S): Wang, Jianji; Discordia, Robert P.; Crispino, Gerard A.; Li, Jun; Grosso, John A.; Polniaszek, Richard; Truc, Vu C.

CORPORATE SOURCE: Process Research & Development, Bristol-Myers Squibb Pharmaceutical Research Institute, New Brunswick, NJ, 08903, USA

SOURCE: Tetrahedron Letters (2003), 44(22), 4271-4273  
 CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 139:230597  
 GI



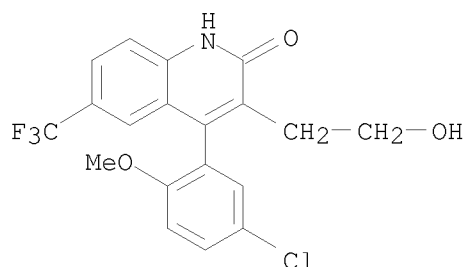
AB Using LiHMDS as the base, a tandem amidation/Knoevenagel condensation of 2-aminobenzophenones with  $\alpha$ -methylene esters or lactones gives 4-aryl-quinolin-2(1H)-ones, e.g. I, in 65-96% yield. This method is mild, highly efficient, and amenable to scaleup.

IT 275375-70-7P 592479-28-2P 593280-94-5P  
 593280-99-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (mild and efficient synthesis of arylquinolinones via tandem amidation  
 Knoevenagel/condensation of aminobenzophenones with esters or lactones)

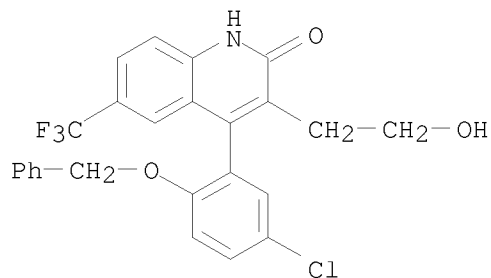
RN 275375-70-7 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



RN 592479-28-2 CAPLUS

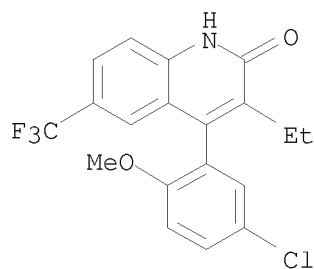
CN 2(1H)-Quinolinone, 4-[5-chloro-2-(phenylmethoxy)phenyl]-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



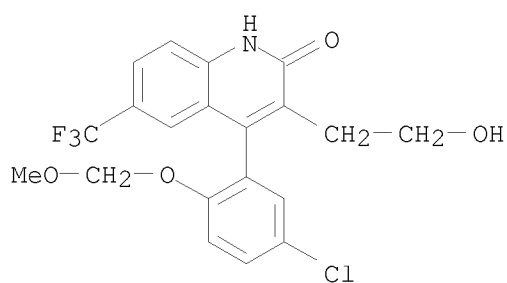
RN 593280-94-5 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-ethyl-6-(trifluoromethyl)- (CA INDEX NAME)



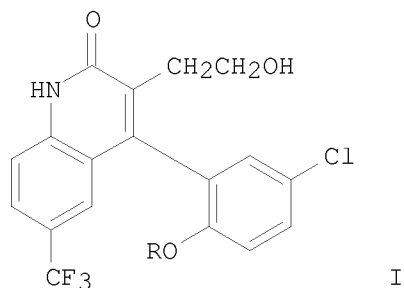


RN 593280-99-0 CAPLUS  
 CN 2(1H)-Quinolinone, 4-[5-chloro-2-(methoxymethoxy)phenyl]-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 69 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:345281 CAPLUS  
 DOCUMENT NUMBER: 139:230595  
 TITLE: Selective removal of a benzyl protecting group in the presence of an aryl chloride under gaseous and transfer hydrogenolysis conditions  
 AUTHOR(S): Li, Jun; Wang, Steve; Crispino, Gerard A.; Tenhuisen, Karen; Singh, Ambarish; Grosso, John A.  
 CORPORATE SOURCE: Pharmaceutical Research Institute, Process Research & Development, Bristol-Myers Squibb Co., New Brunswick, NJ, 08903-0191, USA  
 SOURCE: Tetrahedron Letters (2003), 44(21), 4041-4043  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 139:230595  
 GI

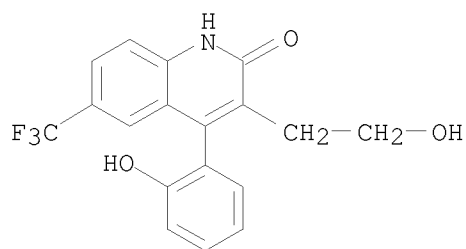


AB Selective removal of a benzyl protecting group in the presence of an aryl chloride, i.e., I (R = benzyl) → I (R = H), using Pd/C under gaseous and transfer hydrogenolysis conditions is described. The addition of chloride salts to the debenzylolation reaction provides excellent selectivity, i.e., the amount of dechlorination product is minimized.

IT 592479-29-3P  
 RL: BYP (Byproduct); PREP (Preparation)  
 (selective removal of benzyl protecting group in presence of aryl chloride under gaseous and transfer hydrogenolysis conditions)

RN 592479-29-3 CAPLUS

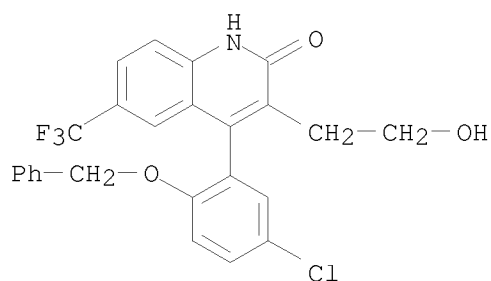
CN 2(1H)-Quinolinone, 3-(2-hydroxyethyl)-4-(2-hydroxyphenyl)-6-(trifluoromethyl)- (CA INDEX NAME)



IT 592479-28-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (selective removal of benzyl protecting group in presence of aryl chloride under gaseous and transfer hydrogenolysis conditions)

RN 592479-28-2 CAPLUS

CN 2(1H)-Quinolinone, 4-[5-chloro-2-(phenylmethoxy)phenyl]-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)

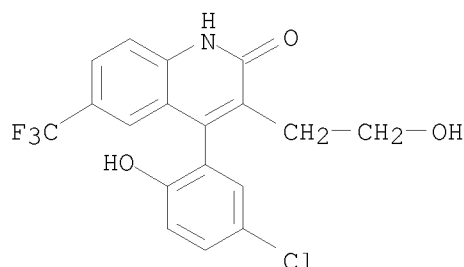


IT 275375-69-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)

(selective removal of benzyl protecting group in presence of aryl chloride under gaseous and transfer hydrogenolysis conditions)

RN 275375-69-4 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 70 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:269919 CAPLUS

DOCUMENT NUMBER: 139:164449

TITLE: A study of the relationship between the chemical structures and the fluorescence quantum yields of coumarins, quinoxalinones and benzoxazinones for the development of sensitive fluorescent derivatization reagents

AUTHOR(S): Azuma, Kentaro; Suzuki, Sachiko; Uchiyama, Seiichi; Kajiro, Toshi; Santa, Tomofumi; Imai, Kazuhiro

CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, The University of Tokyo, Bunkyo-ku, Tokyo, 113-0033, Japan

SOURCE: Photochemical & Photobiological Sciences (2003), 2(4), 443-449

CODEN: PPSHCB; ISSN: 1474-905X

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:164449

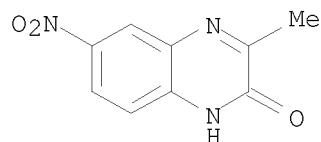
AB To develop new fluorescent derivatization reagents, we investigated the relationship between the chemical structures and the fluorescence quantum yields ( $\Phi_f$ ) of coumarins, quinoxalinones and benzoxadinones. Forty-six compds. were synthesized and their fluorescence spectra were measured in n-hexane, Et acetate, methanol and water. The energy levels of these compds. were calculated by combination of the semi-empirical AM1 and INDO/S (CI = all) methods. The  $\Delta E(T_n(n, \pi^*), S_1(\pi, \pi^*))$  (the energy gap between the  $T_n(n, \pi^*)$  and  $S_1(\pi, \pi^*)$  states) values were well correlated with the  $\Phi_f$  values, which enables us to predict the  $\Phi_f$  values from their chemical structures. Based on this relationship, 3-phenyl-7-N-piperazinoquinoxalin-2(1H)-one (PQ-Pz) and 7-(3-(S)-aminopyrrolidin-1-yl)-3-phenylquinoxalin-2-(1H)-one (PQ-APy) were developed as fluorescent derivatization reagents for carboxylic acids. The derivs. of the carboxylic acids with PQ-Pz and PQ-APy showed large  $\Phi_f$  values even in polar solvents, suggesting that these reagents are suitable for the microanal. of biol. important carboxylic acids by reversed phase HPLC.

IT 19801-10-6

RL: PRP (Properties)

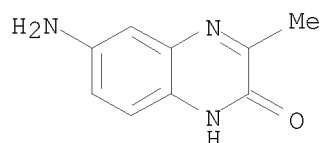
(relationship between chemical structures and fluorescence quantum yields of coumarins, quinoxalinones and benzoxazinones for development of sensitive fluorescent derivatization reagents)

RN 19801-10-6 CAPLUS  
CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)



IT 19801-05-9P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(relationship between chemical structures and fluorescence quantum yields  
of coumarins, quinoxalinones and benzoxazinones for development of  
sensitive fluorescent derivatization reagents)

RN 19801-05-9 CAPLUS  
CN 2(1H)-Quinoxalinone, 6-amino-3-methyl- (CA INDEX NAME)



REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 71 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:261820 CAPLUS

DOCUMENT NUMBER: 138:287978

TITLE: Novel ligands for the HisB10 Zn<sup>2+</sup> sites of the R-state  
insulin hexamer

INVENTOR(S): Olsen, Helle Birk; Kaarsholm, Niels C.; Madsen, Peter;  
Ostergaard, Soren; Ludvigsen, Svend; Jakobsen, Palle;  
Petersen, Anders Klarskov; Steensgaard, Dorte Bjerre

PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.; Novo Nordisk Health Care AG

SOURCE: PCT Int. Appl., 342 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003027081	A2	20030403	WO 2002-DK595	20020913
WO 2003027081	A3	20040325		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2460541	A1	20030403	CA 2002-2460541	20020913
AU 2002340773	A1	20030407	AU 2002-340773	20020913

EP 1429763	A2	20040623	EP 2002-774468	20020913
EP 1429763	B1	20070530		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002012522	A	20040810	BR 2002-12522	20020913
HU 2004001492	A2	20041129	HU 2004-1492	20020913
CN 1558762	A	20041229	CN 2002-820340	20020913
JP 2005508335	T	20050331	JP 2003-530671	20020913
AT 363278	T	20070615	AT 2002-774468	20020913
ES 2288195	T3	20080101	ES 2002-774468	20020913
US 20030229120	A1	20031211	US 2003-332541	20030514
ZA 2004001839	A	20050916	ZA 2004-1839	20040305
IN 2004CN00529	A	20051223	IN 2004-CN529	20040311
MX 2004PA02404	A	20040531	MX 2004-PA2404	20040312
NO 2004001494	A	20040413	NO 2004-1494	20040413
PRIORITY APPLN. INFO.:			DK 2001-1337	A 20010914
			US 2001-323925P	P 20010921
			DK 2002-1066	A 20020705
			US 2002-396051P	P 20020710
			WO 2002-DK595	W 20020913

OTHER SOURCE(S): MARPAT 138:287978

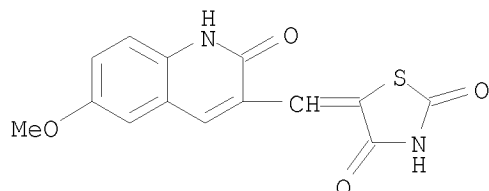
AB Novel ligands for the HisB10 Zn<sup>2+</sup> sites of the R-state insulin hexamer that are capable of prolonging the action of insulin preps. are disclosed. The ligands stabilize the hexamers and modify solubility in the neutral range, thus releasing insulin slowly following s.c. injection. Zinc-binding ligands A-B-C-D-X [A is a group which reversibly binds to a HisB10 Zn<sup>2+</sup> site of an insulin hexamer; B is a linker selected from a valence bond or a chemical group GB of formula -B1-B2-CO-, -B1-B2-SO<sub>2</sub>-, -B1-B2-CH<sub>2</sub>-, or -B1-B2-NH-, where B1 is a valence bond, O, S, NH, or alkylimino and B2 is a valence bond, alk(en)(yn)ylene, (hetero)arylene, alkanedioyl, etc.; C is a fragment consisting of 0-5 neutral amino acids; D is a fragment comprising 1 to 20 pos. charged groups selected from amino or guanidino groups; X is OH, NH<sub>2</sub> or a diamino group], including pharmaceutically-acceptable salts, isomers or racemates, are claimed. Thus, benzotriazol-5-ylcarbonyl-Gly<sup>2</sup>-Arg<sup>5</sup>-NH<sub>2</sub> (BT-G2R5) was prepared and its effect on the pH-solubility profile of an insulin preparation is shown graphically.

IT 503827-44-9P 503827-49-4P

RL: BCP (Biochemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)  
(novel ligands for histidine-B10 zinc(II) sites of R-state insulin hexamer)

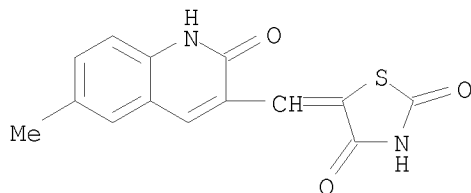
RN 503827-44-9 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)

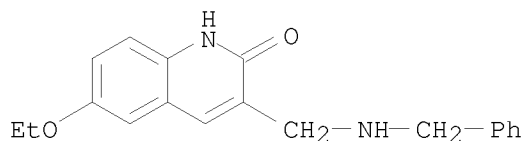


RN 503827-49-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



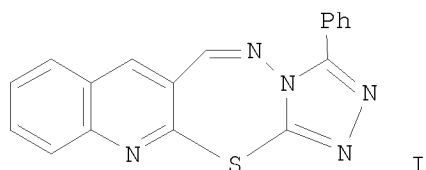
L28 ANSWER 72 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:151405 CAPLUS  
 DOCUMENT NUMBER: 138:368869  
 TITLE: Synthesis of substituted 4,5-dihydro[1,4]oxazepino-[7,6-b]quinolin-3-ones  
 AUTHOR(S): Kombarov, R. V.; Yurovskaya, M. A.  
 CORPORATE SOURCE: M. V. Lomonosov Moscow State University, Moscow, 119899, Russia  
 SOURCE: Chemistry of Heterocyclic Compounds (New York, NY, United States) (Translation of Khimiya Geterotsiklicheskikh Soedinenii) (2002), 38(9), 1154-1155  
 CODEN: CHCCAL; ISSN: 0009-3122  
 PUBLISHER: Kluwer Academic/Consultants Bureau  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:368869  
 AB Title compds. were prepared by N-chloroacetylation of 3-aminomethyl-2-quinolones followed by cyclization with KOH. For example, 4-benzyl-8-ethoxy-4,5-dihydro[1,4]oxazepino-[7,6-b]quinolin-3-one was prepared in 68% yield from 3-(N-benzylaminomethyl)-6-ethoxy-2-quinolone.  
 IT 483290-88-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (synthesis of substituted dihydrooxazepinoquinolinones)  
 RN 483290-88-6 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-3-[[ (phenylmethyl) amino]methyl]- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 73 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:79360 CAPLUS  
 DOCUMENT NUMBER: 139:6851  
 TITLE: One pot reaction: synthesis, characterization and biological activity of 3-alkyl/aryl-9-substituted 1,2,4-triazolo[3,4-b] [1,3,4]quinolino thiadiazepines  
 AUTHOR(S): Kalluraya, Balakrishna; Gururaja, R.; Rai, Ganesha  
 CORPORATE SOURCE: Department of Studies in Chemistry, Mangalore University, Mangalagangothri, 574 199, India  
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (2003), 42B(1), 211-214

PUBLISHER:	CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE:	National Institute of Science Communication
LANGUAGE:	Journal
OTHER SOURCE(S):	English
GI	CASREACT 139:6851

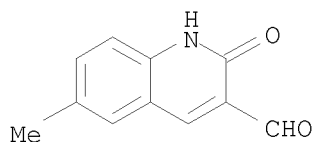


AB Reaction of 6-substituted-2-chloro-3-formylquinoline and 3-substituted-4-amino-5-mercapto-1,2,4-triazole (I) gave the novel thiadiazepine derivs. II (R1 = H, Me, OMe; R2 = Me, Pr, Ph, p-ClC6H4) rather than expected Schiff bases. Alternatively, compds. II were also prepared by the reaction of I with 6-substituted quinolones. The structures of the newly synthesized compds. were proposed on the basis of elemental anal., IR, <sup>1</sup>H NMR and mass spectral data. Some of the new synthetic compds. were also screened for their antibacterial and antifungal activity. Most of them showed significant activity.

IT 101382-53-0P 123990-78-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and biol. activity of 3-alkyl-/aryl-9-substituted 1,2,4-triazolo[3,4-b][1,3,4]quinolino thiadiazepines from 2-chloro-/hydroxy-3-formylquinolines and 3-substituted-4-amino-5-mercapto-1,2,4-triazoles)

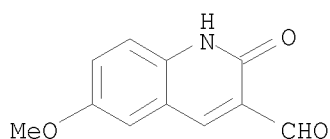
RN 101382-53-0 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



RN 123990-78-3 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

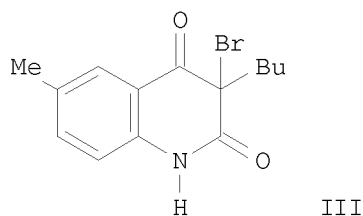
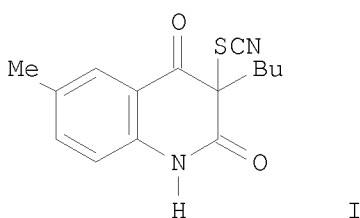
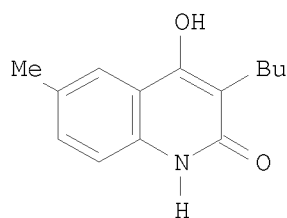
L28 ANSWER 74 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:61769 CAPLUS

DOCUMENT NUMBER: 138:368739

TITLE: Synthesis of 3-thiocyanato-1H,3H-quinoline-2,4-diones

AUTHOR(S): Klasek, Antonin; Polis, Jiri; Mrkvicka, Vladimir;  
 Kosmrlj, Janez  
 CORPORATE SOURCE: Department of Chemistry and Environmental Technology,  
 Faculty of Technology, Tomas Bata University, Zlin,  
 762 72, Czech Rep.  
 SOURCE: Journal of Heterocyclic Chemistry (2002), 39(6),  
 1315-1320  
 CODEN: JHTCAD; ISSN: 0022-152X  
 PUBLISHER: HeteroCorporation  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:368739  
 GI



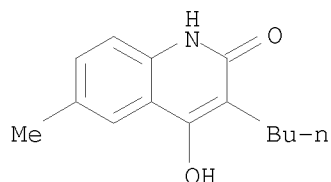
AB 4-Hydroxy-1H-quinolin-2-ones, e.g. I, react with thiocyanogen in acetic acid to produce the corresponding 3-thiocyanato-1H,3H-quinoline-2,4-diones, e.g. II, in good yields. In some cases, 3-bromo-1H,3H-quinoline-2,4-diones, e.g. III, were isolated as minor reaction products. Compds. such as II are very reactive towards nucleophiles and easily hydrolyze to the corresponding 4-hydroxy-1H-quinoline-2-ones.

IT 266348-50-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (synthesis of 3-thiocyanato-1H,3H-quinoline-2,4-diones)

RN 266348-50-9 CAPLUS

CN 2(1H)-Quinolinone, 3-butyl-4-hydroxy-6-methyl- (CA INDEX NAME)



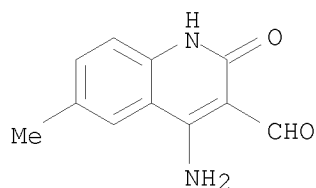
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 75 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

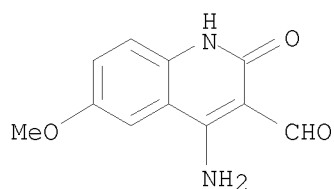
ACCESSION NUMBER: 2002:939671 CAPLUS



DOCUMENT NUMBER: 138:287551  
 TITLE: A convenient synthesis of benzo[h]cyclopenta[b][1,6]naphthyridin-6(5H)-ones  
 AUTHOR(S): Prakash, G. Arul; Rajendran, S. P.  
 CORPORATE SOURCE: Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
 SOURCE: Asian Journal of Chemistry (2003), 15(1), 500-502  
 CODEN: AJCHEW; ISSN: 0970-7077  
 PUBLISHER: Asian Journal of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:287551  
 AB Substituted benzo[h]cyclopenta[b][1,6]naphthyridin-6(5H)-ones were synthesized by the condensation of 4-amino-3-formylquinoline-2(1H)-ones with cyclopentanone in the presence of HOAc and H<sub>2</sub>SO<sub>4</sub>.  
 IT 419566-60-2 419566-62-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of benzo[h]cyclopenta[b][1,6]naphthyridin-6(5H)-ones from cyclocondensation of amino(formyl)quinolinones with cyclopentanone)  
 RN 419566-60-2 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 4-amino-1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



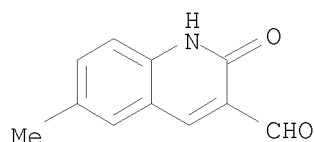
RN 419566-62-4 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 4-amino-1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



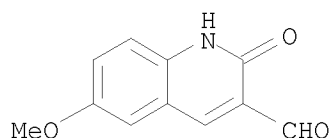
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 76 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:939547 CAPLUS  
 DOCUMENT NUMBER: 138:321159  
 TITLE: Synthesis of derivatives of 3-phenyl-2H-pyrano[2,3-b]quinoline-2-ones and comparison of their biological activities  
 AUTHOR(S): Kumar, N. Venkatesh; Rajendran, S. P.  
 CORPORATE SOURCE: Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India  
 SOURCE: Asian Journal of Chemistry (2003), 15(1), 111-116  
 CODEN: AJCHEW; ISSN: 0970-7077  
 PUBLISHER: Asian Journal of Chemistry

DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:321159  
 AB Synthesis of a series of title compds. including several hitherto unknown derivs. of 3-phenyl-2H-pyrano[2,3-b]quinolin-2-ones is reported by the Perkin type reaction of 3-formyl-2-quinolones with sodium salt of phenylacetic acid. The 3-formyl-2-quinolones in turn were obtained from 2-chloro-3-formylquinolines. Structures of all the products have been established by spectral and elemental anal. data. Biocidal activities have been tested in vitro.  
 IT 101382-53-0, 1,2-Dihydro-6-methyl-2-oxo-3-Quinolinecarboxaldehyde  
 123990-78-3, 1,2-Dihydro-6-methoxy-2-oxo-3-Quinolinecarboxaldehyde  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of (phenyl)pyranoquinolinone derivs. and their biol. activities)  
 RN 101382-53-0 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



RN 123990-78-3 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 77 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:504781 CAPLUS

DOCUMENT NUMBER: 137:78964

TITLE: Preparation of farnesyl transferase inhibiting 4-substituted quinolines and quinazolines

INVENTOR(S): Angibaud, Patrick Rene; Venet, Marc Gaston

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

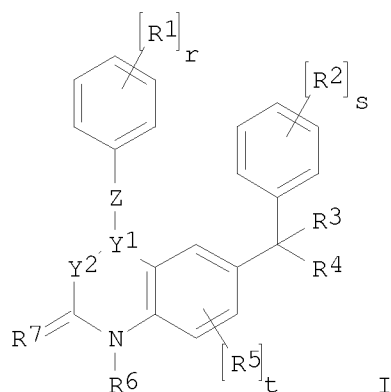
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051835	A1	20020704	WO 2001-EP15234	20011221
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				

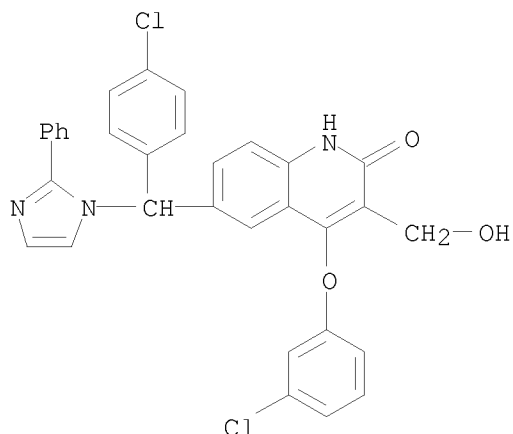
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 AU 2002240867 A1 20020708 AU 2002-240867 20011221  
 EP 1347966 A1 20031001 EP 2001-988065 20011221  
 EP 1347966 B1 20060308  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 JP 2004516323 T 20040603 JP 2002-552930 20011221  
 AT 319704 T 20060315 AT 2001-988065 20011221  
 ES 2260316 T3 20061101 ES 2001-988065 20011221  
 US 20040063944 A1 20040401 US 2003-451902 20030626  
 US 7129356 B2 20061031  
 PRIORITY APPLN. INFO.: EP 2000-204715 A 20001227  
 WO 2001-EP15234 W 20011221  
 OTHER SOURCE(S): MARPAT 137:78964  
 GI



AB The title compds. [I; r, s = 0-5; t = 0-3; Y1Y2 = C:N, C:CR9, CHNR9, CHCHR9 (wherein R9 = H, halo, CN, etc.); Z = O, S, SO, etc.; R1, R2 = N3, OH, halo, etc.; R3 = H, halo, CN, etc.; R4 = (un)substituted imidazolyl, triazolyl, pyridyl; R5 = CN, OH, halo, etc.; R6 = H, alkyl, cyanoalkyl, etc.; R7 = O, S; or R6 and R7 together form CONHN, N:NN, etc.] having farnesyl transferase inhibiting activity (no biol. data), were prepared and formulated. E.g., a multi-step synthesis of I [r = 0; s = 1; t = 0; Y1Y2 = C:CH; Z = O; R2 = 4-Cl; R3 = H; R4 = 1-imidazolyl; R6 = H; R7 = O] was given.

IT 439906-20-4P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of farnesyl transferase inhibiting 4-substituted quinolines and quinazolines)

RN 439906-20-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(3-chlorophenoxy)-6-[(4-chlorophenyl)(2-phenyl-1H-imidazol-1-yl)methyl]-3-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 78 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:275968 CAPLUS

DOCUMENT NUMBER: 136:309857

TITLE: Preparation of quinolines and quinolinones as metabotropic glutamate receptor antagonists

INVENTOR(S): Mabire, Dominique Jean-Pierre; Venet, Marc Gaston; Coupa, Sophie; Poncelet, Alain Philippe; Lesage, Anne Simone Josephine

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

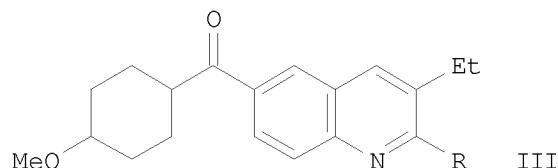
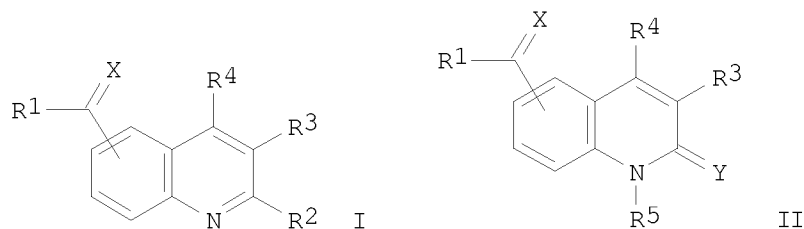
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002028837	A1	20020411	WO 2001-EP11135	20010925
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
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CA 2421782	A1	20020411	CA 2001-2421782	20010925
AU 2001093847	A	20020415	AU 2001-93847	20010925
BR 2001014253	A	20030701	BR 2001-14253	20010925
EP 1332133	A1	20030806	EP 2001-974298	20010925
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HU 2003002167	A2	20031028	HU 2003-2167	20010925
JP 2004510764	T	20040408	JP 2002-532423	20010925
NZ 524945	A	20050128	NZ 2001-524945	20010925
EE 200300126	A	20050415	EE 2003-126	20010925
CN 1703403	A	20051130	CN 2001-816717	20010925
AU 2001293847	B2	20070524	AU 2001-293847	20010925
KR 818965	B1	20080404	KR 2003-702014	20030211

HR 2003000229	A1	20030630	HR 2003-229	20030324
IN 2003MN00328	A	20050211	IN 2003-MN328	20030324
BG 107672	A	20040130	BG 2003-107672	20030326
ZA 2003002515	A	20040630	ZA 2003-2515	20030331
NO 2003001474	A	20030505	NO 2003-1474	20030401
NO 325079	B1	20080128		
MX 2003PA02907	A	20030624	MX 2003-PA2907	20030401
US 20040082592	A1	20040429	US 2003-381987	20030814
US 7115630	B2	20061003		
US 20050209273	A1	20050922	US 2005-133678	20050520
PRIORITY APPLN. INFO.:			EP 2000-203419	A 20001002
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OTHER SOURCE(S):	MARPAT	136:309857		
GI				



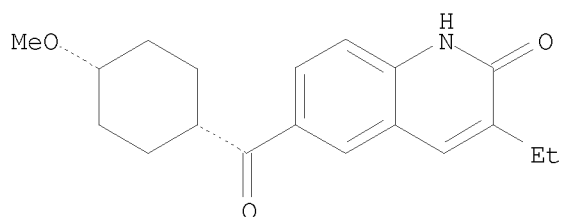
AB The title compds. [I or II; X = O, C(R<sub>6</sub>)<sub>2</sub>; (wherein R<sub>6</sub> = H, aryl, alkyl, etc.); R<sub>1</sub> = alkyl, aryl, thienyl, etc.; R<sub>2</sub> = H, halo, CN, etc.; R<sub>3</sub>, R<sub>4</sub> = H, alkyl; or R<sub>2</sub> and R<sub>3</sub> may be taken together to form (CH<sub>2</sub>)<sub>3</sub>, (CH<sub>2</sub>)<sub>4</sub>, CH:CHCH:CH, etc.; or R<sub>3</sub> and R<sub>4</sub> may be taken together to form CH:CHCH:CH, (CH<sub>2</sub>)<sub>4</sub>; R<sub>5</sub> = H, cycloalkyl, piperidinyl, etc.; Y = O, S; or Y and R<sub>5</sub> may be taken together to form CH:NN, N:NN, NCH:CH], useful for treating or preventing glutamate-induced diseases of the central nervous system, were prepared. Thus, reacting cis-III [R = Cl] with SnMe<sub>4</sub> in the presence of Pg(PPh<sub>3</sub>)<sub>4</sub> in PhMe afforded 17% cis-III [R = Me] which showed antagonism at a dose of 2.5 mg/kg bodyweight in cold allodynia test in rats with a Bennett ligation.

IT 409340-70-1P  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of quinolines and quinolinones as metabotropic glutamate receptor antagonists)

RN 409340-70-1 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.



IT 409340-69-8P 409340-98-3P 409341-14-6P  
 409344-31-6P 409344-32-7P 409344-33-8P  
 409344-34-9P 409344-35-0P 409344-36-1P  
 409344-37-2P 409344-38-3P 409344-39-4P  
 409344-41-8P 409344-42-9P 409344-43-0P  
 409344-44-1P 409344-45-2P 409344-47-4P  
 409344-48-5P 409344-50-9P 409344-52-1P  
 409344-54-3P 409344-56-5P 409344-58-7P  
 409344-60-1P 409344-62-3P 409344-64-5P  
 409344-66-7P 409344-68-9P 409344-70-3P  
 409344-72-5P 409344-79-2P 409344-81-6P  
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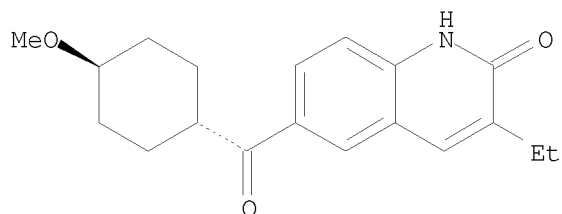
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)

(preparation of quinolines and quinolinones as metabotropic glutamate  
 receptor antagonists)

RN 409340-69-8 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]- (CA  
 INDEX NAME)

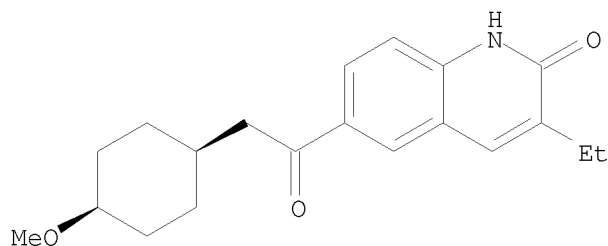
Relative stereochemistry.



RN 409340-98-3 CAPLUS

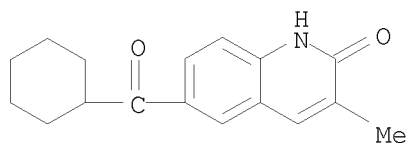
CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)acetyl]- (9CI) (CA  
 INDEX NAME)

Relative stereochemistry.



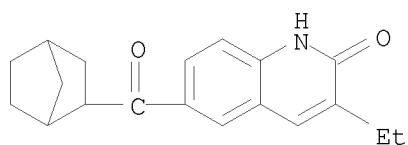
RN 409341-14-6 CAPLUS

CN 2(1H)-Quinolinone, 6-(cyclohexylcarbonyl)-3-methyl- (CA INDEX NAME)



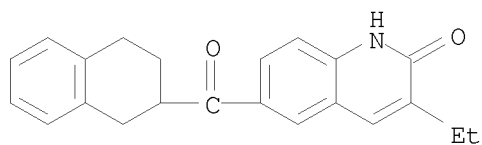
RN 409344-31-6 CAPLUS

CN 2(1H)-Quinolinone, 6-(bicyclo[2.2.1]hept-2-ylcarbonyl)-3-ethyl- (CA INDEX NAME)



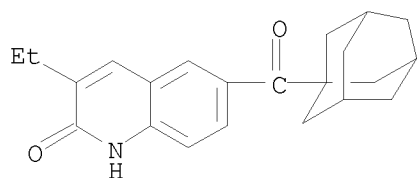
RN 409344-32-7 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(1,2,3,4-tetrahydro-2-naphthalenyl)carbonyl]- (CA INDEX NAME)



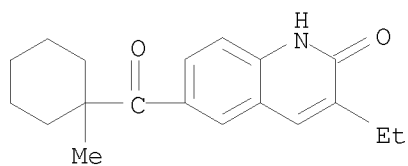
RN 409344-33-8 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylcarbonyl)- (CA INDEX NAME)



RN 409344-34-9 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(1-methylcyclohexyl)carbonyl]- (CA INDEX NAME)

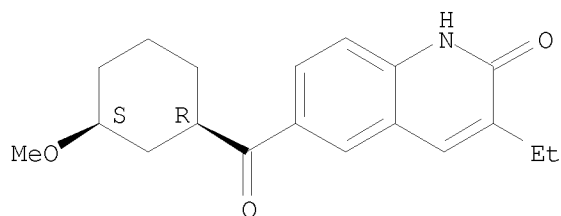


RN 409344-35-0 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[[ (1R,3S)-3-methoxycyclohexyl]carbonyl]-,

rel- (CA INDEX NAME)

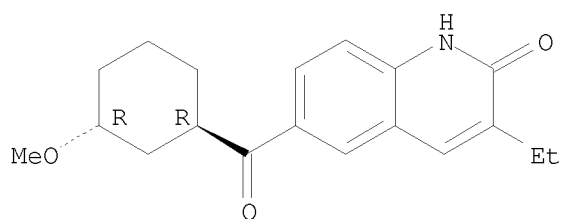
Relative stereochemistry.



RN 409344-36-1 CAPLUS

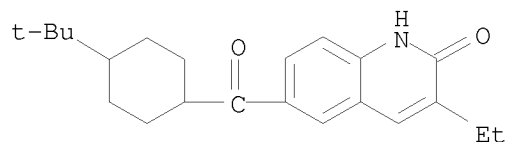
CN 2(1H)-Quinolinone, 3-ethyl-6-[[ (1R,3R)-3-methoxycyclohexyl]carbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.



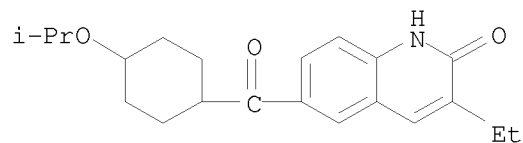
RN 409344-37-2 CAPLUS

CN 2(1H)-Quinolinone, 6-[[4-(1,1-dimethylethyl)cyclohexyl]carbonyl]-3-ethyl-, (CA INDEX NAME)



RN 409344-38-3 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[[4-(1-methylethoxy)cyclohexyl]carbonyl]- (CA INDEX NAME)

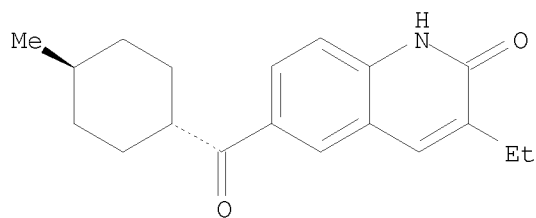


RN 409344-39-4 CAPLUS

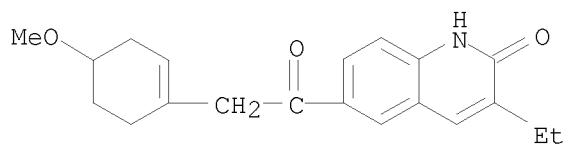
CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methylcyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

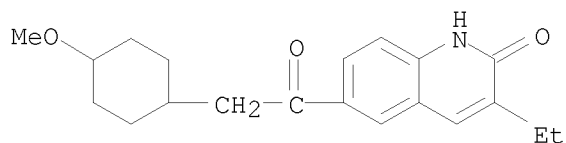




RN 409344-41-8 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxy-1-cyclohexen-1-yl)acetyl]- (9CI)  
 (CA INDEX NAME)

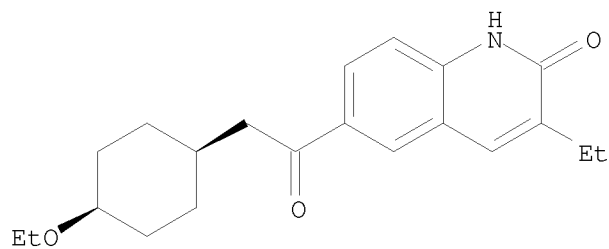


RN 409344-42-9 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxycyclohexyl)acetyl]- (9CI) (CA  
 INDEX NAME)



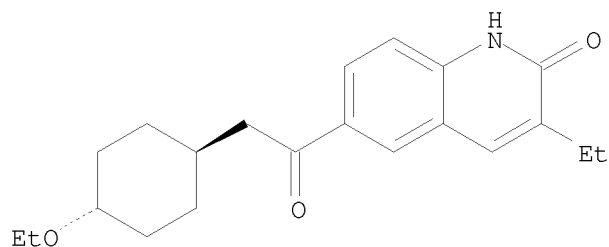
RN 409344-43-0 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(cis-4-ethoxycyclohexyl)acetyl]-3-ethyl- (9CI) (CA  
 INDEX NAME)

Relative stereochemistry.

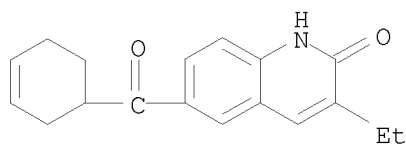


RN 409344-44-1 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(trans-4-ethoxycyclohexyl)acetyl]-3-ethyl- (9CI)  
 (CA INDEX NAME)

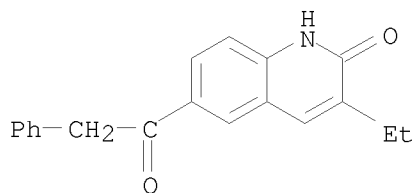
Relative stereochemistry.



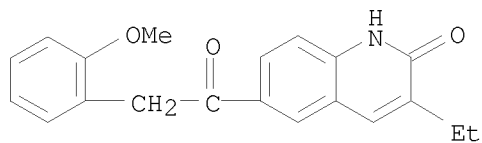
RN 409344-45-2 CAPLUS  
 CN 2(1H)-Quinolinone, 6-(3-cyclohexen-1-ylcarbonyl)-3-ethyl- (CA INDEX NAME)



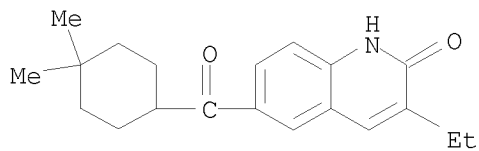
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 CN 2(1H)-Quinolinone, 3-ethyl-6-(phenylacetyl)- (9CI) (CA INDEX NAME)



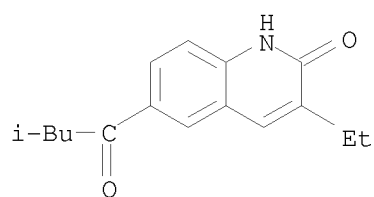
RN 409344-48-5 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(2-methoxyphenyl)acetyl]- (9CI) (CA INDEX NAME)



RN 409344-50-9 CAPLUS  
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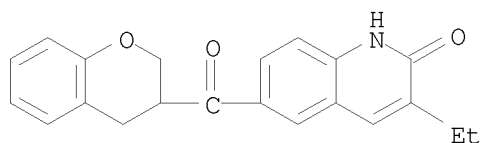


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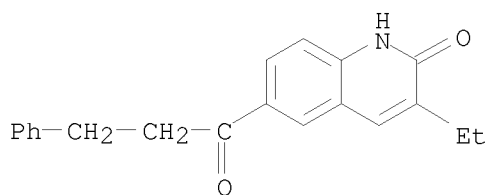
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(CA INDEX NAME)



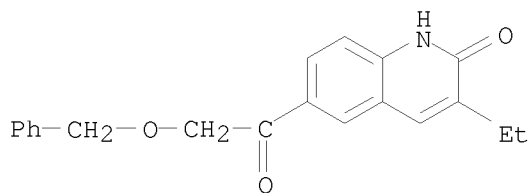
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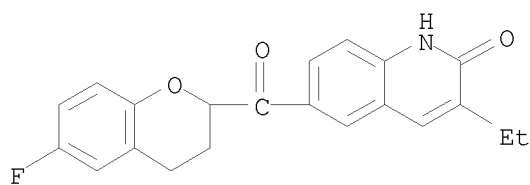
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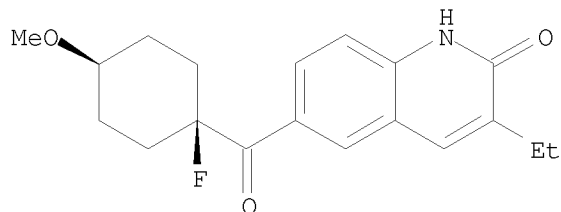
RN 409344-60-1 CAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(6-fluoro-3,4-dihydro-2H-1-benzopyran-2-yl)carbonyl]- (CA INDEX NAME)



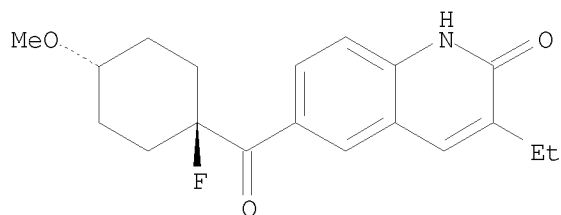
RN 409344-62-3 CAPLUS  
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 (CA INDEX NAME)

Relative stereochemistry.

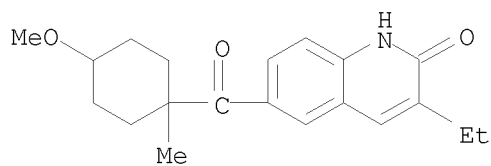


RN 409344-64-5 CAPLUS  
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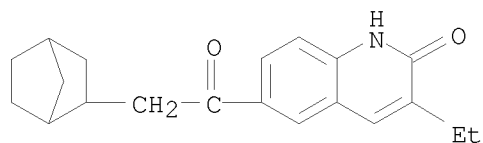
Relative stereochemistry.



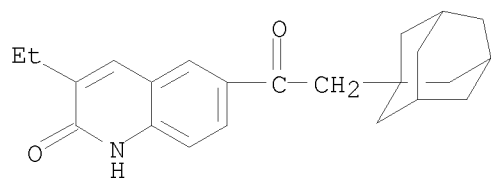
RN 409344-66-7 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxy-1-methylcyclohexyl)carbonyl]-  
 (CA INDEX NAME)



RN 409344-68-9 CAPLUS  
 CN 2(1H)-Quinolinone, 6-(bicyclo[2.2.1]hept-2-ylacetyl)-3-ethyl- (9CI) (CA INDEX NAME)

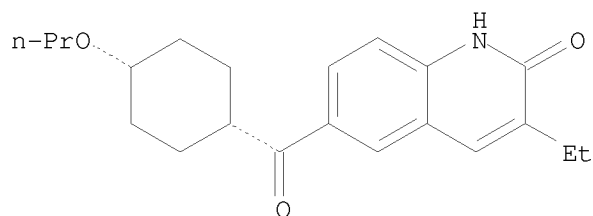


RN 409344-70-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylacetyl)- (9CI)  
 (CA INDEX NAME)



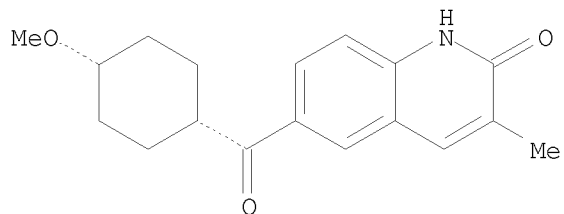
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 CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-propoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.



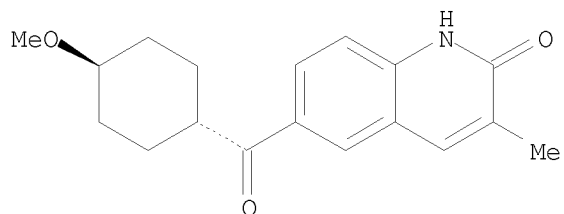
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Relative stereochemistry.

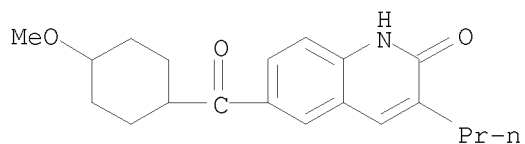


RN 409344-81-6 CAPLUS  
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Relative stereochemistry.

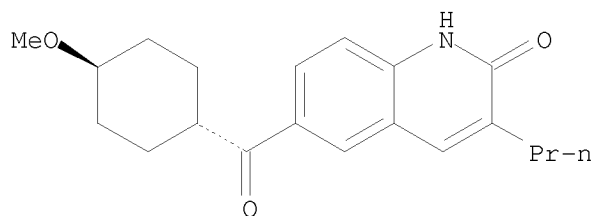


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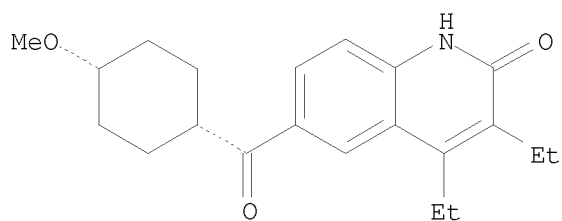
RN 409344-85-0 CAPLUS  
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Relative stereochemistry.



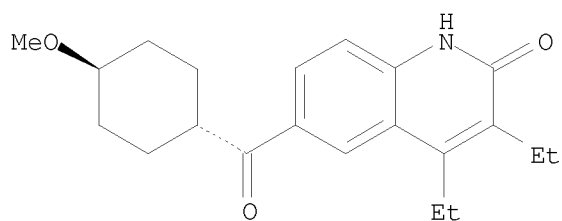
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Relative stereochemistry.

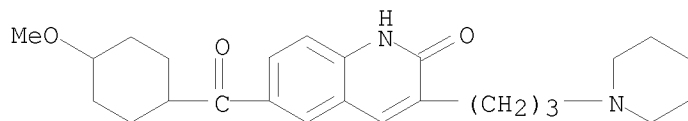


RN 409344-91-8 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-diethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

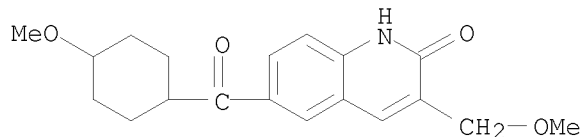
Relative stereochemistry.



RN 409345-13-7 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-[3-(1-piperidinyl)propyl]- (CA INDEX NAME)



RN 409345-14-8 CAPLUS  
 CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-(methoxymethyl)-  
 (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 79 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:240764 CAPLUS

DOCUMENT NUMBER: 136:279472

TITLE: Preparation of 6-heterocyclylmethyl quinolinone  
 derivatives as farnesyl transferase inhibitors for  
 treatment of tumors and proliferative diseases  
 INVENTOR(S): Angibaud, Patrick Rene; Venet, Marc Gaston; Mevellec,  
 Laurence Anne

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

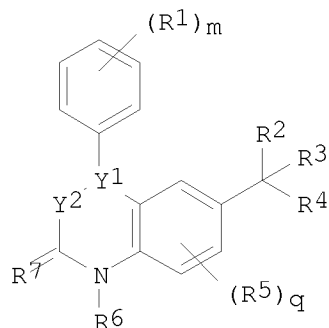
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024687	A1	20020328	WO 2001-EP10975	20010918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001093835	A	20020402	AU 2001-93835	20010918
EP 1322644	A1	20030702	EP 2001-974284	20010918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004521863	T	20040722	JP 2002-529097	20010918
US 20030199547	A1	20031023	US 2003-381362	20030324
US 7067531	B2	20060627		

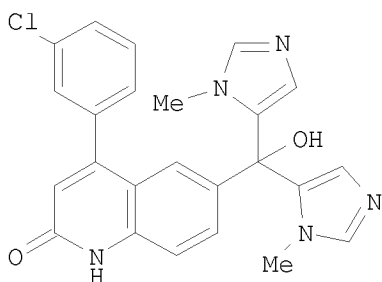
PRIORITY APPLN. INFO.: EP 2000-203368 A 20000925  
 EP 2001-202189 A 20010607  
 WO 2001-EP10975 W 20010918

OTHER SOURCE(S): MARPAT 136:279472

GI



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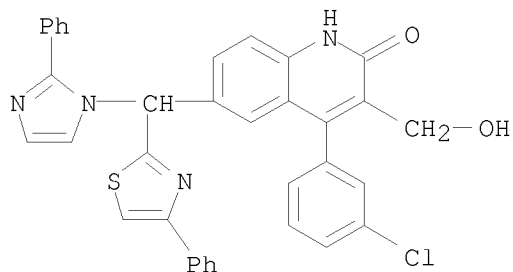


II

- AB Title compds. I [wherein m = independently 0-5; q = 0-3; Y1Y2 = C:CR9 or CHCHR9; C9 = H, halo, CN, (cyclo)alkyl, hydroxyalkyl, alkoxy(alkyl), aminoalkyl, (amino)alkenyl, (amino)alkynyl, halocarbonyl, hydroxycarbonyl, alkoxy carbonyl, aryl, (un)substituted amino or carbamoyl, etc.; R1 = azido, OH, halo, CN, NO2, trihalomethyl, alkoxy, aryloxy, heterocyclyloxy, alkylthio, or (un)substituted (cyclo)alkyl, alkenyl, alkynyl, carbamoyl, amino, sulfamoyl, etc.; or 2 adjacent R1 = OCH2O, OCH2CH2O, OCH:CH, OCH2CH2, OCH2CH2CH2, CH:CHCH:CH; R2 = (un)substituted mono- or bicyclic heterocyclic ring; R3 = H, halo, CN, alkenyl, alkynyl, hydroxycarbonyl, alkoxy carbonyl, aryl, heterocyclyl, alkoxy, alkylthio, (un)substituted (cyclo)alkyl or amino, etc.; R4 = (un)substituted imidazolyl, triazolyl, or pyridyl; R5 = CN, OH, halo, alkenyl, alkynyl, hydroxycarbonyl, alkoxy carbonyl, or (un)substituted (cyclo)alkyl, alkoxy, amino, or carbamoyl, etc.; R6 = halo or (un)substituted (cyclo)alkyl, alkenyl, alkynyl, alkylthio, carboxy, carbamoyl, acyl(amino), etc.; R7 = O or S; or R6R7 = (un)substituted CH:CHN:, CH:NN:, CONHN:, N;NN:, N:CHN:, CH:CHCH:, CH:NCH:, CONHCH:, N:NCH:, or CH2(CH2)0-1CH2N:; or pharmaceutically acceptable salts, N-oxides, or stereochem. isomeric forms thereof] were prepared. For example, cyclization of N-[4-bromo-2-(3-chlorobenzoyl)phenyl]acetamide (3-step preparation given) using t-BuOH•K in DME afforded 6-bromo-4-(3-chlorophenyl)-2(1H)-quinoline (80.76%), which was then methoxylated (86%). Addition of bis(1-methyl-1H-imidazol-5-yl)methanone in the presence of BuLi in THF to give the  $\alpha,\alpha$ -bis(1-methyl-1H-imidazol-5-yl)-6-quinolinemethanol (5%), followed by reflux in HCl and THF overnight, produced 18 II•2HCl (quant.). I have potent farnesyl transferase inhibitory effect and are useful for inhibiting proliferative diseases and growth of tumors expressing an activated ras oncogene (no data).
- IT 406216-78-2P, 4-(3-Chlorophenyl)-3-(hydroxymethyl)-6-[(2-phenyl-1H-imidazol-1-yl)(4-phenyl-2-thiazolyl)methyl]-2(1H)-quinolinone ethanedioate  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (farnesyl transferase inhibitor; preparation of quinolinone derivs. as farnesyl transferase inhibitors for treatment of tumors and proliferative diseases)
- RN 406216-78-2 CAPLUS
- CN 2(1H)-Quinolinone, 4-(3-chlorophenyl)-3-(hydroxymethyl)-6-[(2-phenyl-1H-imidazol-1-yl)(4-phenyl-2-thiazolyl)methyl]-, ethanedioate (salt) (9CI)  
 (CA INDEX NAME)

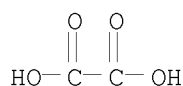


CRN 406216-77-1  
CMF C35 H25 Cl N4 O2 S

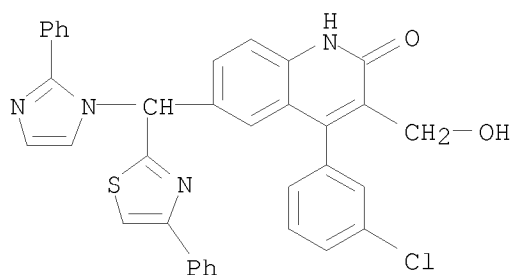


CM 2

CRN 144-62-7  
CMF C2 H2 O4



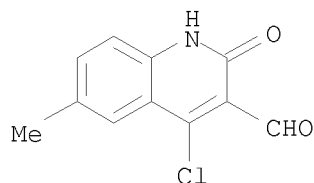
IT 406216-77-1P, 4-(3-Chlorophenyl)-3-(hydroxymethyl)-6-[(2-phenyl-1H-imidazol-1-yl)(4-phenyl-2-thiazolyl)methyl]-2(1H)-quinolinone  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate; preparation of quinolinone derivs. as farnesyl transferase inhibitors for treatment of tumors and proliferative diseases)  
RN 406216-77-1 CAPLUS  
CN 2(1H)-Quinolinone, 4-(3-chlorophenyl)-3-(hydroxymethyl)-6-[(2-phenyl-1H-imidazol-1-yl)(4-phenyl-2-thiazolyl)methyl]- (CA INDEX NAME)



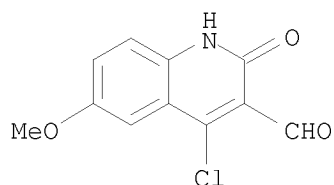
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 80 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2002:29432 CAPLUS  
DOCUMENT NUMBER: 136:340605  
TITLE: A convenient synthesis of 8,9,10,11-tetrahydrodibenzo[b,h][1,6]naphthyridin-6(5H)ones  
AUTHOR(S): Prakash, G. Arul; Rajendran, S. P.  
CORPORATE SOURCE: Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India

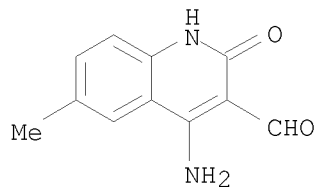
SOURCE: Heterocyclic Communications (2001), 7(4), 353-358  
 CODEN: HCOMEX; ISSN: 0793-0283  
 PUBLISHER: Freund Publishing House Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 136:340605  
 AB Substituted 8,9,10,11-tetrahydrodibenzo[b,h][1,6]naphthyridin-6(5H)ones have been synthesized by the condensation of 4-amino-3-formylquinolin-2(1H)ones (I) with cyclohexanone in presence of acetic acid and sulfuric acid. I were obtained by condensation of anilines with CH<sub>2</sub>(COCl)<sub>2</sub>, formylation, and partial hydrolysis of the dichloro analogs.  
 IT 156992-52-8P 419566-57-7P 419566-60-2P  
 419566-62-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of 8,9,10,11-tetrahydrodibenzo[b,h][1,6]naphthyridin-6(5H)ones)  
 RN 156992-52-8 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 4-chloro-1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



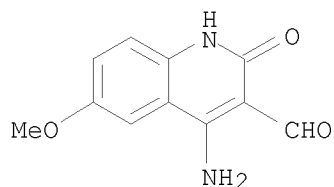
RN 419566-57-7 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 4-chloro-1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



RN 419566-60-2 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 4-amino-1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)

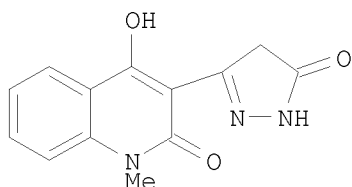


RN 419566-62-4 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 4-amino-1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)

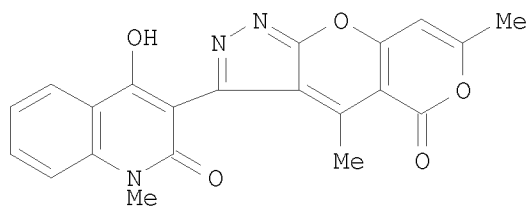


REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 81 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001:730150 CAPLUS  
 DOCUMENT NUMBER: 136:102322  
 TITLE: Chemistry of substituted quinolinones. III. Synthesis and reactions of some novel 3-pyrazolyl-2-quinolinones  
 AUTHOR(S): Abass, Mohamed; Othman, Elham S.  
 CORPORATE SOURCE: Department of Chemistry, Faculty of Education, Ain Shams University, Cairo, 11711, Egypt  
 SOURCE: Synthetic Communications (2001), 31(21), 3361-3376  
 CODEN: SYNCAV; ISSN: 0039-7911  
 PUBLISHER: Marcel Dekker, Inc.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 136:102322  
 GI

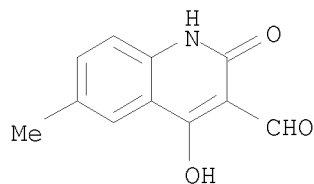


I

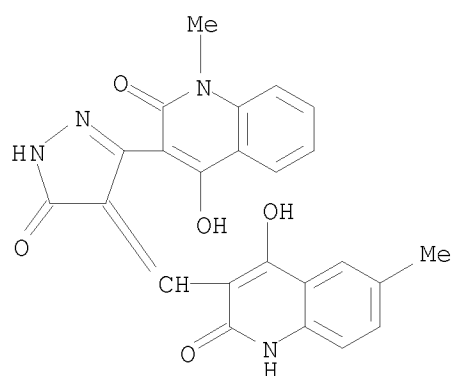


II

AB The preparation of 4-hydroxy-1-methyl-3-(5-oxo-4,5-dihydro-1H-3-pyrazolyl)-1,2-dihydro-2-quinolinone (I) and its hydrazono-, aminomethylidene- and arylidene derivs. has been achieved. The synthesis of fused heterocyclic polynuclear systems containing quinolinone moiety, e.g., II, is also described.  
 IT 156992-48-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and reactions of 3-pyrazolyl-2-quinolinones)  
 RN 156992-48-2 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



IT 329737-46-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and reactions of 3-pyrazolyl-2-quinolinones)  
 RN 329737-46-4 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[4-[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]-4,5-dihydro-5-oxo-1H-pyrazol-3-yl]-4-hydroxy-1-methyl- (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 82 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:472676 CAPLUS

DOCUMENT NUMBER: 135:61248

TITLE: Quinolone compounds for use in treating viral infections, particularly AIDS

INVENTOR(S): Andrews, Clarence Webster, III; Freeman, George Andrew; Hopkins, Andrew Lee

PATENT ASSIGNEE(S): Glaxo Group Ltd., UK

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

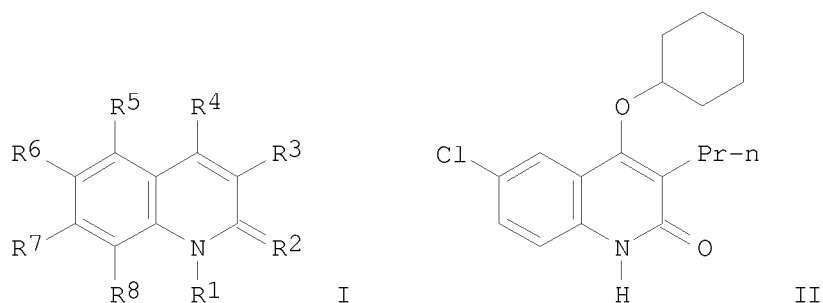
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046150	A2	20010628	WO 2000-US33930	20001215
WO 2001046150	A3	20011129		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 EP 1244629 A2 20021002 EP 2000-986390 20001215  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 JP 2003518098 T 20030603 JP 2001-547061 20001215  
 US 20030069271 A1 20030410 US 2002-168187 20020617  
 PRIORITY APPLN. INFO.: GB 1999-30061 A 19991220  
 WO 2000-US33930 W 20001215  
 OTHER SOURCE(S): MARPAT 135:61248  
 GI

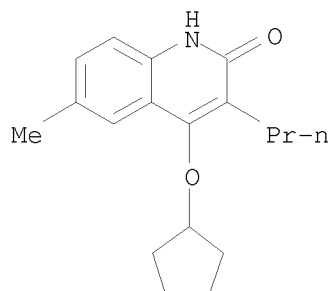


AB The invention relates to quinolone compds. I and their use in the treatment of viral infections [wherein: R1 = H; R2 = O or S; R3 = CF3, cyano, alkyl (un)substituted with alkyl or CF3, or OR15, wherein R15 = alkyl (un)substituted with alkyl; R4 = OR11, wherein R11 = alkenyl (un)substituted with alkyl, alkyl (un)substituted with alkyl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocyclealkyl, heterocyclealkynyl, cycloalkylalkenyl, arylalkynyl, cycloalkylalkynyl, SR12, wherein R12 = cycloalkyl, S(O)R12, wherein R12 = cycloalkyl, or NR13R14 wherein R13 and R14 = H or alkyl, (un)substituted with alkyl; R5 = H, NO2, halo, alkyl (un)substituted with alkyl or CF3; R6 = H, halo, alkyl, cyano, CF3, or OR10 wherein R10 = alkyl or CF3; R7 = H, alkyl, halo, aryl, alkylaryl, alkynyl, heteroaryl, or OR9 wherein R9 = alkyl; R8 = H, halo, cyano, NO2, or OR16, wherein R16 = H or alkyl (un)substituted with alkyl or CF3; provided that R6 and R7 cannot both be H; and further provided that when R1 = H, R2 = O, R3 = alkyl, R4 = OR11 wherein R11 = alkyl, R5 = H, R6 = H or OR10 wherein R10 = alkyl, R7 = H, alkyl, or OR9 wherein R9 = alkyl, then R8 cannot be H or OR16 wherein R16 = H or alkyl]. I are useful for treatment of viral infections, particularly retroviral infections, and especially HIV. Examples include 49 syntheses, activities of selected compds. against HIV in MT4 cells in vitro, and 18 formulations. For instance, 4-chloroaniline and di-Et propylmalonate were cyclocondensed by refluxing in Ph2O to give 84% 6-chloro-4-hydroxy-3-propyl-2(1H)-quinolinone. Etherification of this with cyclohexyl bromide, using K2CO3 and Et3N in DMF at 165°, gave title compound II in low yield (1%). In the aforementioned HIV assay, II and several other compds. had IC50 values in the highest range 0.005-0.1  $\mu$ M.

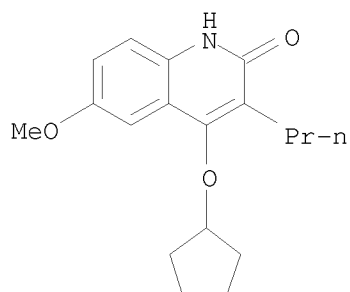
IT 345912-96-1P 345912-97-2P 345912-98-3P  
 345912-99-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (drug candidate; preparation of quinolinones as antiviral drugs, particularly for treatment of AIDS)

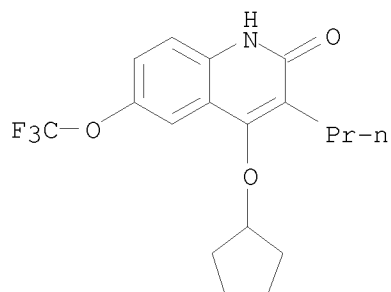
RN 345912-96-1 CAPLUS  
CN 2(1H)-Quinolinone, 4-(cyclopentyloxy)-6-methyl-3-propyl- (CA INDEX NAME)



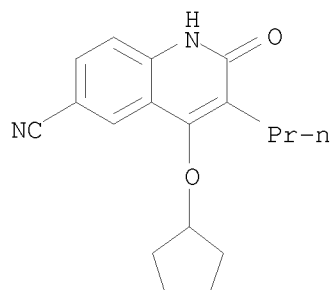
RN 345912-97-2 CAPLUS  
CN 2(1H)-Quinolinone, 4-(cyclopentyloxy)-6-methoxy-3-propyl- (CA INDEX NAME)



RN 345912-98-3 CAPLUS  
CN 2(1H)-Quinolinone, 4-(cyclopentyloxy)-3-propyl-6-(trifluoromethoxy)- (CA INDEX NAME)



RN 345912-99-4 CAPLUS  
CN 6-Quinolinecarbonitrile, 4-(cyclopentyloxy)-1,2-dihydro-2-oxo-3-propyl- (CA INDEX NAME)



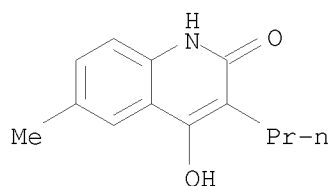
IT 345913-38-4P 345913-39-5P 345913-40-8P  
345913-41-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(intermediate; preparation of quinolinones as antiviral drugs, particularly  
for treatment of AIDS)

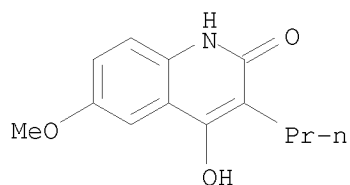
RN 345913-38-4 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-propyl- (CA INDEX NAME)



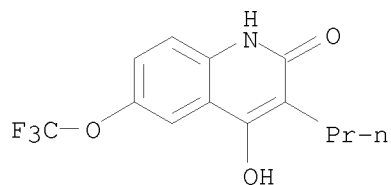
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CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-propyl- (CA INDEX NAME)



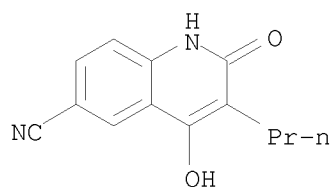
RN 345913-40-8 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-3-propyl-6-(trifluoromethoxy)- (CA INDEX  
NAME)



RN 345913-41-9 CAPLUS

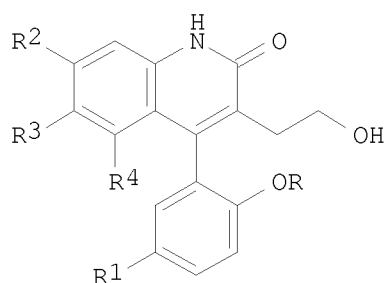
CN 6-Quinolinecarbonitrile, 1,2-dihydro-4-hydroxy-2-oxo-3-propyl- (CA INDEX  
NAME)



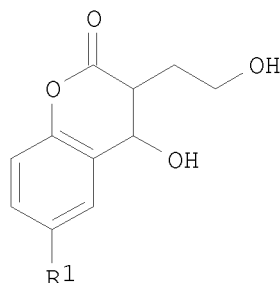
L28 ANSWER 83 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001:416907 CAPLUS  
 DOCUMENT NUMBER: 135:33433  
 TITLE: Preparation of 3-substituted-4-arylquinolin-2-one derivatives as modulators of the large-conductance calcium-activated potassium (BK) channels  
 INVENTOR(S): Crispino, Gerard; Wang, Shaopeng; Li, Jun  
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA  
 SOURCE: PCT Int. Appl., 25 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001040191	A1	20010607	WO 2000-US32382	20001128
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
TW 562799	B	20031121	TW 2000-89125068	20001124
CA 2393012	A1	20010607	CA 2000-2393012	20001128
US 6353119	B1	20020305	US 2000-724056	20001128
EP 1233947	A1	20020828	EP 2000-983775	20001128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
HU 2002003364	A2	20030228	HU 2002-3364	20001128
HU 2002003364	A3	20051128		
JP 2003515593	T	20030507	JP 2001-541876	20001128
AU 769481	B2	20040129	AU 2001-20487	20001128
IN 2002MN00600	A	20040228	IN 2002-MN600	20020510
MX 2002PA05470	A	20030128	MX 2002-PA5470	20020531
PRIORITY APPLN. INFO.:			US 1999-168346P	P 19991201
			WO 2000-US32382	W 20001128
OTHER SOURCE(S):			CASREACT 135:33433; MARPAT 135:33433	
GI				

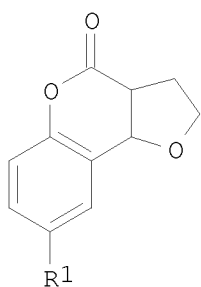




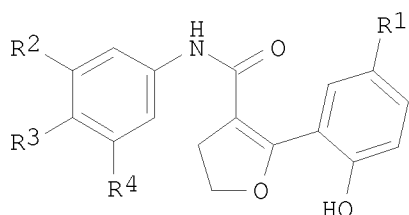
I



II



III



IV

AB The title compds. [I; R = H, Me; R1 = Br, Cl, NO2; R2-R4 = H, halo, NO2, CF3, provided R2-R4 are not all H] were prepared by condensing  $\gamma$ -butyrolactone with the Me ester of a substituted salicylic acid followed by cyclization of the resulting coumarin II with a catalytic amount of acid, treatment of the benzopyran-4-one III with a substituted aniline, and photochem. cyclization of the dihydrofuran IV.

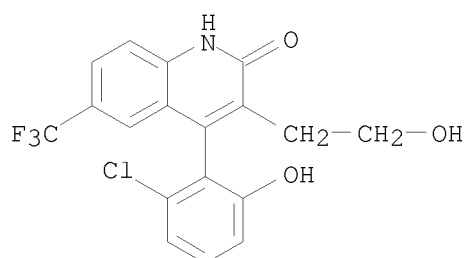
IT 343628-29-5P 343628-30-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 3-substituted-4-arylquinolin-2-one derivs. as modulators of the large-conductance calcium-activated potassium (BK) channels)

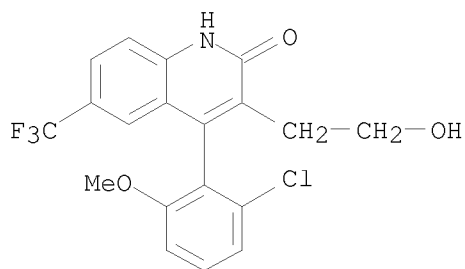
RN 343628-29-5 CAPLUS

CN 2(1H)-Quinolinone, 4-(2-chloro-6-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



RN 343628-30-8 CAPLUS

CN 2(1H)-Quinolinone, 4-(2-chloro-6-methoxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 84 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:78227 CAPLUS

DOCUMENT NUMBER: 134:131078

TITLE: Preparation of bicyclic antagonists selective for the  $\alpha\text{v}\beta 3$  integrin

INVENTOR(S): Zask, Arie; Hauze, Diane Barbara; Kees, Kenneth Lewis; Coghlan, Richard Dale; Yardley, John

PATENT ASSIGNEE(S): American Home Products Corporation, USA

SOURCE: PCT Int. Appl., 256 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

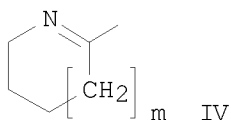
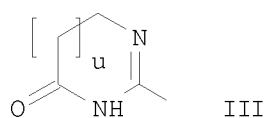
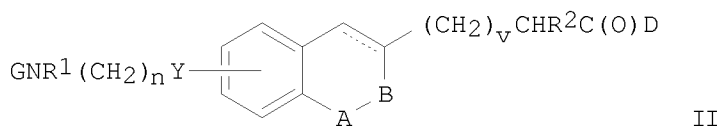
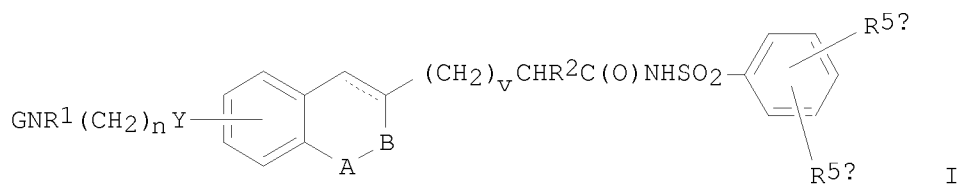
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001007036	A1	20010201	WO 2000-US19885	20000720
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2378860	A1	20010201	CA 2000-2378860	20000720
BR 2000012683	A	20020416	BR 2000-12683	20000720
EP 1198231	A1	20020424	EP 2000-950508	20000720
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
US 6429214	B1	20020806	US 2000-620381	20000720
JP 2003505416	T	20030212	JP 2001-511922	20000720
MX 2002PA00722	A	20020722	MX 2002-PA722	20020121
US 20030109523	A1	20030612	US 2002-163844	20020606
PRIORITY APPLN. INFO.:			US 1999-172238P	P 19990721
			US 1999-358035	A 19990721
			US 2000-620381	A3 20000720
			WO 2000-US19885	W 20000720

OTHER SOURCE(S): MARPAT 134:131078

GI



AB This invention provides novel bicyclic compds. I and II (tetrahydro- and dihydroquinolines, tetrahydronaphthalenes and tetrahydro-6H-benzocycloheptenes) or pharmaceutically acceptable salts thereof that exhibit activity as inhibitors of bone resorption with minimal inhibition of platelet aggregation mediated by  $\alpha$ IIb $\beta$ 3 integrin. An example is [6-(3-guanidinopropoxy)-1,2,3,4-tetrahydronaphthalen-2-yl]acetic acid-trifluoroacetate. Results are reported for some of the claimed compds. for vitronectin receptor ( $\alpha$ v $\beta$ 3) binding, effect on integrin ( $\alpha$ v $\beta$ 3)-mediated attachment of cells to osteopontin, osteoclast bone pitting, effects on PTH-induced hypercalcemia of thyro-parathyroidectomized male rats, effects on serum calcium in TPTX male rats treated with rPTH(1-34), and effect on ADP-induced platelet aggregation. In I and II, the dotted line represents the presence of an optional double bond. N = 2-5. V = 0, 1. A-B = diradical -CH<sub>2</sub>(CH<sub>2</sub>)<sub>m</sub>- or -NR<sup>5</sup>C(O)-. M = 1, 2. Y = -O-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH:CH-, -C.tplbond.C-, -NR<sup>1a</sup>C(O)-. R<sup>1</sup> = H or straight chain alkyl of 1-6 C atoms; phenylalkyl wherein the alkyl moiety is a straight chain alkyl of 1-6 C atoms and the Ph moiety is optionally substituted with one or more substituents which may be the same or different and are selected from hydroxy, amino, halogen, straight chain alkyl of 1-6 C atoms, branched chain alkyl of 3-7 C atoms, cyano, nitro, alkylamino of 1-6 C atoms, and dialkylamino of 1-6 C atoms; heterocycloalkyl, wherein the alkyl moiety is a straight chain alkyl of 1-6 C atoms and the heterocyclo moiety is selected from a 5- or 6-membered heterocyclic ring which contains 1-3 heteroatoms which may be the same or different, selected from N, O and S optionally substituted with  $\geq 1$  substituents which may be the same or different, and are selected from hydroxy, amino, halogen, straight chain alkyl of 1-6 C atoms, cyano and nitro. R<sup>1a</sup> = H or straight chain alkyl of 1-6 C atoms; phenylalkyl wherein the alkyl moiety is a straight chain alkyl of 1-6 C atoms and the Ph moiety is optionally substituted with  $\geq 1$  substituents which may be the same or different and are selected from hydroxy, amino, halogen, straight chain alkyl of 1-6 C atoms, branched chain alkyl of 3-7 C atoms, cyano, nitro, alkylamino of 1-6 C atoms, and dialkylamino of 1-6 C atoms. R<sup>2</sup> = H, -NHR<sup>1</sup>, or -OR<sup>1</sup>, aryl of 6-12 C atoms optionally substituted with  $\geq 1$  substituents selected from straight chain alkyl of 1-6 C atoms, alkoxy of 1-6 C atoms, -S-alkyl of 1-6 C atoms, cyano, nitro, halogen and phenyl; the heterocyclic moiety is selected from a 5- or 6-membered heterocyclic ring which contains 1-3 heteroatoms which may be the same or different, selected from N, O and S optionally substituted with  $\geq 1$  substituents which may be the same

or different, and are selected from hydroxy, amino, halogen, straight chain alkyl of 1-6 C atoms, cyano and nitro; phenylalkyl wherein the alkyl moiety is a straight chain alkyl of 1-6 C atoms and the Ph moiety is optionally substituted with  $\geq 1$  substituents which may be the same or different and are selected from hydroxy, amino, halogen, straight chain alkyl of 1-6 C atoms, branched chain alkyl of 3-7 C atoms, cyano, nitro, alkylamino of 1-6 C atoms, and dialkylamino of 1-6 C atoms; heterocycloalkyl, wherein the alkyl moiety is a straight chain alkyl of 1-6 C atoms and the heterocyclic moiety is selected from a 5- or 6-membered heterocyclic ring which contains 1-3 heteroatoms which may be the same or different, selected from N, O and S optionally substituted with  $\geq 1$  substituents which may be the same or different, and are selected from hydroxy, amino, halogen, straight chain alkyl of 1-6 C atoms, cyano and nitro. G is a N-containing moiety selected from  $\text{H}_2\text{NC}(\text{:NH})-$ ,  $\text{R}_4\text{C}(\text{O})\text{NHC}(\text{:NC}(\text{O})\text{R}_4)-$ ,  $\text{R}_1\text{NHC}(\text{O})-$ , 2-pyrimidinyl, 1,4,5,6-tetrahydropyrimidin-2-yl, 6-amino-2-pyridinyl, 2-pyridinyl, 2-imidazolin-2-yl, 3-amino-1,2,4-triazol-5-yl, III and IV. U = 0, 1.  $\text{R}_4$  = straight chain alkyl of 1-6 C atoms, alkoxy or phenylalkyloxy wherein the alkyl moiety is a straight chain alkyl of 1-6 C atoms and the Ph moiety is optionally substituted with  $\geq 1$  substituents which may be the same or different and are selected from hydroxy, amino, halogen, straight chain alkyl of 1-6 C atoms, branched chain alkyl of 3-7 C atoms, cyano, nitro, alkylamino of 1-6 C atoms, and dialkylamino of 1-6 C atoms.  $\text{R}_5$  = H, straight chain alkyl of 1-6 C atoms, or phenylalkyl wherein the alkyl moiety is a straight chain alkyl of 1-6 C atoms and the Ph moiety is optionally substituted with  $\geq 1$  substituents which may be the same or different and are selected from hydroxy, amino, halogen, straight chain alkyl of 1-6 C atoms, branched chain alkyl of 3-7 C atoms, cyano, nitro, alkylamino of 1-6 C atoms, and dialkylamino of 1-6 C atoms.  $\text{R}_5\text{a}$  = H, straight chain alkyl of 1-6 C atoms, or phenylalkyl wherein the alkyl moiety is a straight chain alkyl of 1-6 C atoms and the Ph moiety is optionally substituted with  $\geq 1$  substituents which may be the same or different and are selected from hydroxy, amino, halogen, straight chain alkyl of 1-6 C atoms, branched chain alkyl of 3-7 C atoms, cyano, nitro, alkylamino of 1-6 C atoms, and dialkylamino of 1-6 C atoms. The optional double bond is a single bond when A-B is the diradical  $-\text{CH}_2(\text{CH}_2)_m-$ . In II, D =  $\text{OR}_3$ ,  $\text{NHSO}_2\text{C}_6\text{H}_3\text{R}_5\text{aR}_5\text{b}$ ;  $\text{R}_3$  = H, straight chain alkyl of 1-6 C atoms optionally substituted with a group selected from amino, hydroxyl and carboxyl or branched chain alkyl of 3-7 C atoms optionally substituted with a group selected from amino, hydroxyl and carboxyl; certain combinations of values of variables are excluded as described in the claims. Pharmaceutical compns. containing the above compds. are claimed to be useful against mammalian bone resorption diseases selected from osteoporosis, hypercalcemia of malignancy, osteopenia due to bone metastases, periodontal disease, hyperparathyroidism, periarticular erosions in rheumatoid arthritis, Paget's disease, immobilization-induced osteopenia and the result of glucocorticoid treatment. Although the methods of preparation of the compds. are not claimed, >200 example preps. of products and intermediates are given.

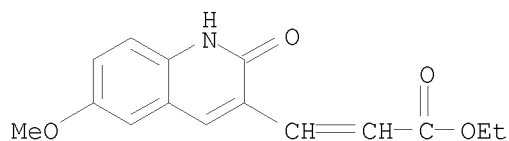
IT

321886-56-0P, 3-(6-Methoxy-2-oxo-1,2-dihydroquinolin-3-yl)acrylic acid ethyl ester 321886-84-4P, (6-Hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)acetic acid ethyl ester

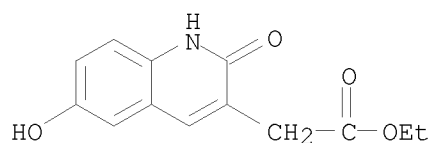
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of bicyclic antagonists selective for  $\alpha\text{v}\beta 3$  integrin)

RN 321886-56-0 CAPLUS  
 CN 2-Propenoic acid, 3-(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)-, ethyl ester (CA INDEX NAME)



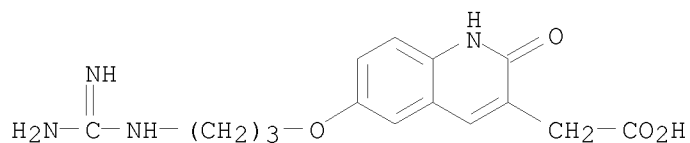
RN 321886-84-4 CAPLUS  
 CN 3-Quinolineacetic acid, 1,2-dihydro-6-hydroxy-2-oxo-, ethyl ester (CA INDEX NAME)



IT 321886-86-6P, [6-(3-Guanidinopropoxy)-2-oxo-1,2-dihydroquinolin-3-yl]acetic acid trifluoroacetate 321886-88-8P, [6-(4-Guanidinobutoxy)-2-oxo-1,2-dihydroquinolin-3-yl]acetic acid trifluoroacetate  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of bicyclic antagonists selective for  $\alpha v \beta 3$  integrin)  
 RN 321886-86-6 CAPLUS  
 CN 3-Quinolineacetic acid, 6-[3-[(aminoiminomethyl)amino]propoxy]-1,2-dihydro-2-oxo-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

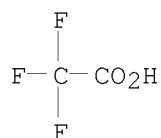
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CM 2

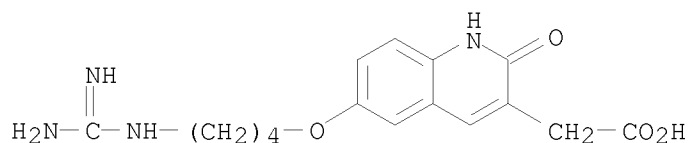
CRN 76-05-1  
 CMF C2 H F3 O2



RN 321886-88-8 CAPLUS  
 CN 3-Quinolineacetic acid, 6-[4-[(aminoiminomethyl)amino]butoxy]-1,2-dihydro-2-oxo-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

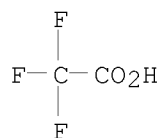
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CRN 321886-87-7  
 CMF C16 H20 N4 O4



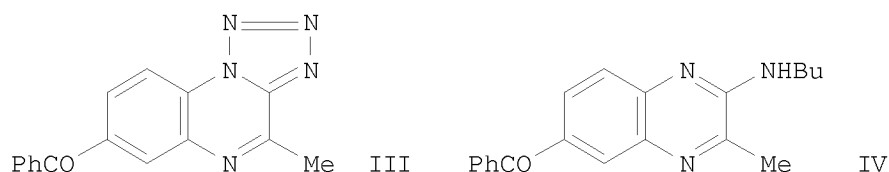
CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 85 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000:527827 CAPLUS  
 DOCUMENT NUMBER: 134:162992  
 TITLE: Synthesis and antimicrobial activities of some novel quinoxalinone derivatives  
 AUTHOR(S): Ali, M. M.; Ismail, M. M. F.; El-Gaby, M. S. A.; Zahran, M. A.; Ammar, Y. A.  
 CORPORATE SOURCE: Dep. of Chemistry, Faculty of Science, Al-Azhar Univ., Cairo, 11884, Egypt  
 SOURCE: Molecules [online computer file] (2000), 5(6), 864-873  
 CODEN: MOLEFW; ISSN: 1420-3049  
 URL: <http://www.mdpi.org/molecules/papers/50600864.pdf>  
 PUBLISHER: Molecular Diversity Preservation International  
 DOCUMENT TYPE: Journal; (online computer file)  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 134:162992  
 GI

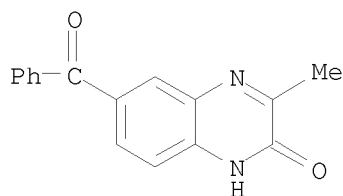


AB Condensation of 4-benzoyl-1,2-phenylenediamine with sodium pyruvate in acetic acid furnished two products, which were identified as 6-benzoyl- (I) and 7-benzoyl-3-methyl-2(1H)-quinoxalinone (II). Fusion of I with aromatic aldehydes furnished the styryl derivs. Alkylation of I and II with di-Me sulfate or Et chloroacetate produced the N-alkyl derivs. Hydrazinolysis of one ester derivative with hydrazine hydrate afforded the hydrazide derivative, which underwent condensation with aldehydes to give the corresponding hydrazone derivs. In addition, chlorination of I with thionyl chloride afforded the 2-chloro derivative, which was subjected to reaction with sodium azide and n-butylamine to yield the corresponding tetrazolo (III) and n-butylamino (IV) derivs., resp. The structures of the compds. prepared were confirmed by anal. and spectral data. Also, some of the synthesized compds. were screened for antimicrobial activity.

IT 325469-51-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and antimicrobial activities of quinoxalinone derivs.)

RN 325469-51-0 CAPLUS

CN 2(1H)-Quinoxalinone, 6-benzoyl-3-methyl- (CA INDEX NAME)

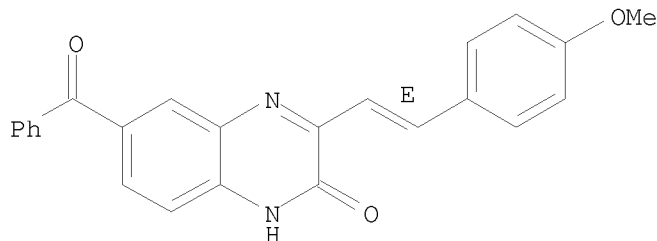


IT 325469-54-3P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and antimicrobial activities of quinoxalinone derivs.)

RN 325469-54-3 CAPLUS

CN 2(1H)-Quinoxalinone, 6-benzoyl-3-[(1E)-2-(4-methoxyphenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.

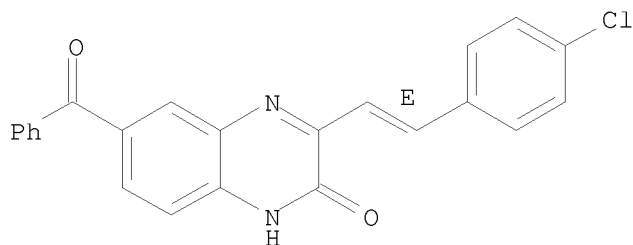


IT 325469-53-2P 325469-55-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and antimicrobial activities of quinoxalinone derivs.)

RN 325469-53-2 CAPLUS

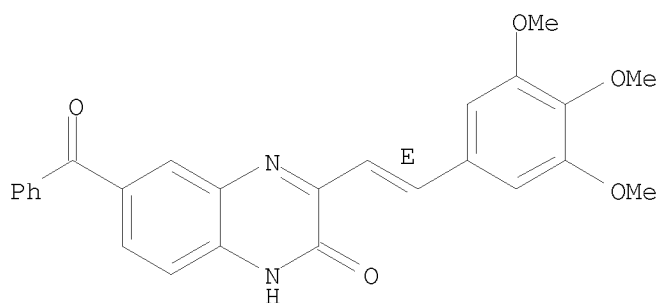
CN 2(1H)-Quinoxalinone, 6-benzoyl-3-[(1E)-2-(4-chlorophenyl)ethenyl]- (CA INDEX NAME)

Double bond geometry as shown.



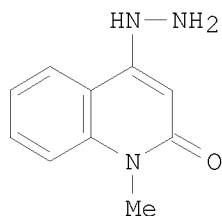
RN 325469-55-4 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-benzoyl-3-[(1E)-2-(3,4,5-trimethoxyphenyl)ethenyl]-  
 (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 86 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000:429555 CAPLUS  
 DOCUMENT NUMBER: 133:222650  
 TITLE: Chemistry of substituted quinolinones. Part II.  
 Synthesis of novel 4-pyrazolylquinolinone derivatives  
 AUTHOR(S): Abass, Mohamed  
 CORPORATE SOURCE: Department of Chemistry, Faculty of Education, Ain  
 Shams University, Cairo, 11711, Egypt  
 SOURCE: Synthetic Communications (2000), 30(15), 2735-2757  
 CODEN: SYNCAV; ISSN: 0039-7911  
 PUBLISHER: Marcel Dekker, Inc.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 133:222650  
 GI



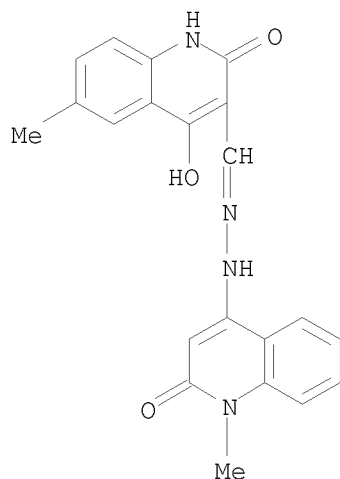


AB 4-Hydrazino-1-methyl-2(1H)quinolinone I was treated with chlorophthalazine, nitrous acid, isothiocyanates and isatines, and also utilized as a precursor for some new 4-pyrazolylquinolinones. Reaction of I with certain 2-acylquinolinones afforded quinolinylpyrazoloquinolinones and/or quinolinylpyrazolylquinolinones.

IT 291518-02-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 291518-02-0 CAPLUS

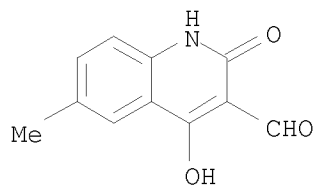
CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo-,  
 3-[(1,2-dihydro-1-methyl-2-oxo-4-quinolinyl)hydrazone] (9CI) (CA INDEX NAME)



IT 156992-48-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with hydrazinoquinolinone)

RN 156992-48-2 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 87 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:414089 CAPLUS

DOCUMENT NUMBER: 133:143953

TITLE: ESR and spectroscopic studies of metal complexes of novel Schiff bases derived from 6-methyl-3-formyl-4-hydroxy-2-(1H)quinolone and 1,3-diaminopropane or N-(2-aminoethyl)-1,3-propanediamine, Part VI

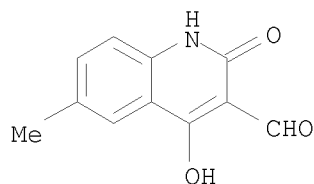
AUTHOR(S): Khalil, Saied M. E.  
 CORPORATE SOURCE: Department of Chemistry, Faculty of Education, Ain Shams University, Cairo, Egypt  
 SOURCE: Journal of Coordination Chemistry (1999), 49(1), 45-61  
 CODEN: JCCMBQ; ISSN: 0095-8972  
 PUBLISHER: Gordon & Breach Science Publishers  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Two novel dianionic tetradentate (N2O2) and pentadentate (N3O2) Schiff base ligands and their corresponding Cu(II), Ni(II), Co(II), Mn(II), VO(IV), Fe(III), UO2(VI), Th(IV), Zn(II) and Cd(II) complexes were prepared and characterized by elemental analyses, IR, visible and ESR spectra, magnetic susceptibility measurements as well as mass spectroscopy. Mononuclear and or dinuclear metal complexes were obtained. The Schiff base ligands were derived from 6-methyl-3-formyl-4-hydroxy-2-(1H)quinolone and 1,3-diaminopropane or N-(2-aminoethyl)-1,3-propanediamine. The Cu(II) complexes have either square-planar or octahedral geometries. The mononuclear Ni(II) complex shows anomalous behavior where both square-planar and octahedral geometries coexist, while its dinuclear complex has an octahedral geometry. Co(II) complexes were either mononuclear or dinuclear and showed five-coordinate trigonal bipyramidal and/or octahedral geometry. These structural geometries were confirmed by the results obtained from the thermal analyses. VO(IV) complexes were octahedral and polymeric. The mononuclear Mn(II) complex of the tetradentate ligand and the dinuclear Fe(III) complex of the pentadentate ligand were the only compds. obtained with these metals and showed octahedral geometry. The UO2(VI) and Cd(II) cations behaved similarly and coordinated to two tetradentate ligand mols. through their outer O-O coordinating sites, while they coordinated to only one mol. of the pentadentate ligand, through their N3O2 or N2O2 sites, resp. This reflects the effect of the cavity size of both ligands towards accommodating large cations. Th(IV) cations were coordinated to two bidentate nitrate anions, thus aiding the ligands to accommodate large cations in their cavities and raising their coordination sphere to either eight or nine. Small Zn(II) cations are well accommodated in the cavities of both ligands.

IT 156992-48-2, 3-Formyl-4-hydroxy-6-methyl-2-(1H)quinolone  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation with 1,3-diaminopropane or N-(2-aminoethyl)-1,3-propanediamine)

RN 156992-48-2 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)

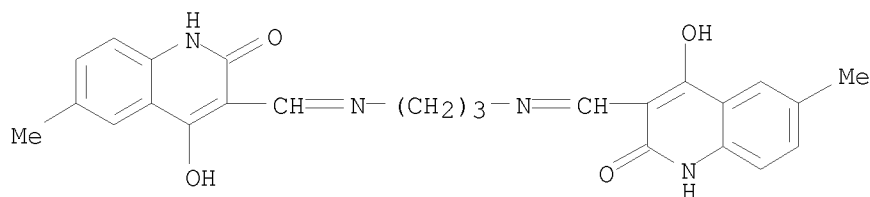


IT 286384-79-0 286384-96-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and complexation with transition metal ions)

RN 286384-79-0 CAPLUS

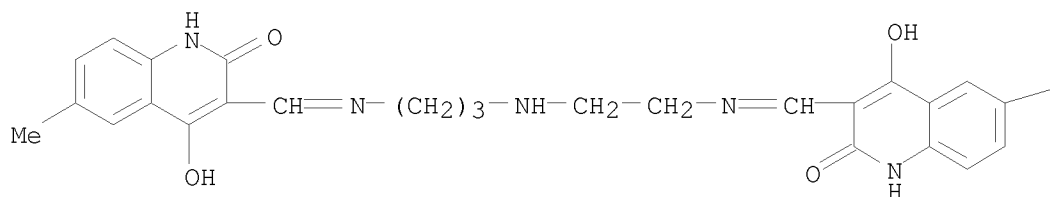
CN 2(1H)-Quinolinone, 3,3'-[1,3-propanediylbis(nitrilomethylidyne)]bis[4-hydroxy-6-methyl- (9CI) (CA INDEX NAME)



RN 286384-96-1 CAPLUS

CN 2(1H)-Quinolinone, 3-[[[3-[[2-[[1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]ethyl]amino]propyl]imino]methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)

PAGE 1-A



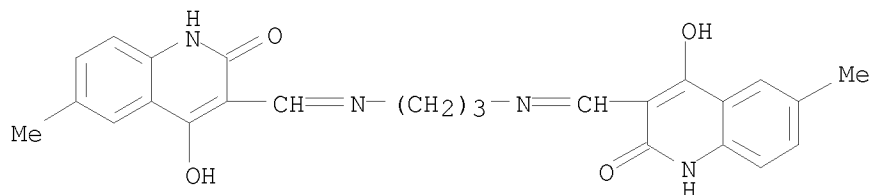
PAGE 1-B

Me

IT 286384-79-0DP, uranyl aqua or cadmium complexes  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation, IR and UV-visible spectra)

RN 286384-79-0 CAPLUS

CN 2(1H)-Quinolinone, 3,3'-[1,3-propanediylbis(nitrilomethylidyne)]bis[4-hydroxy-6-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 88 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:401792 CAPLUS

DOCUMENT NUMBER: 133:43452

TITLE: Preparation of 3-substituted-4-arylquinolin-2-one derivatives as calcium-activated potassium (BK) channel openers

INVENTOR(S): Hewawasam, Piyasena; Starrett, John E., Jr.

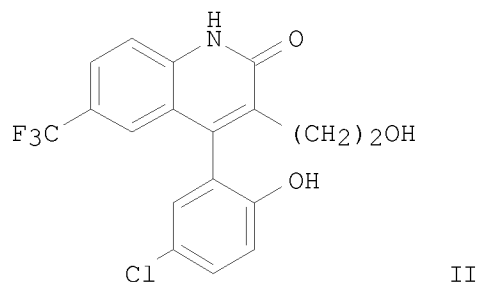
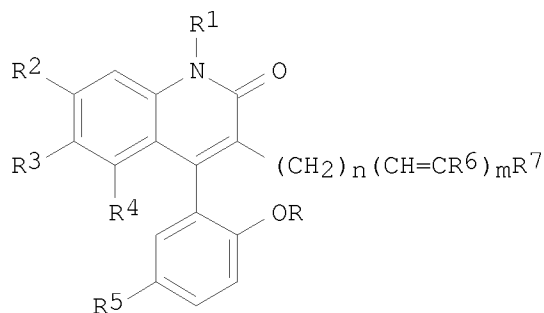
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 88 pp.

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

CODEN: PIXXD2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000034244	A1	20000615	WO 1999-US28428	19991201
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6184231	B1	20010206	US 1999-452523	19991201
BR 9915744	A	20010821	BR 1999-15744	19991201
EP 1133474	A1	20010919	EP 1999-960636	19991201
EP 1133474	B1	20070221		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY				
TR 200101339	T2	20020221	TR 2001-1339	19991201
JP 2002531549	T	20020924	JP 2000-586692	19991201
HU 2002001613	A2	20020928	HU 2002-1613	19991201
HU 2002001613	A3	20030328		
AU 755202	B2	20021205	AU 2000-17491	19991201
CN 1129582	B	20031203	CN 1999-813902	19991201
NZ 510987	A	20040227	NZ 1999-510987	19991201
RU 2240998	C2	20041127	RU 2001-115714	19991201
AT 354569	T	20070315	AT 1999-960636	19991201
ES 2281975	T3	20071001	ES 1999-960636	19991201
TW 495504	B	20020721	TW 1999-88121090	19991202
IN 2001MN00460	A	20050304	IN 2001-MN460	20010426
ZA 2001004455	A	20020530	ZA 2001-4455	20010530
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MX 2001PA05532	A	20011101	MX 2001-PA5532	20010601
PRIORITY APPLN. INFO.:			US 1998-111079P	P 19981204
			WO 1999-US28428	W 19991201
OTHER SOURCE(S):	MARPAT	133:43452		
GI				



AB The title compds. (I) [wherein R and R1 = independently H or Me; R2, R3, and R4 = independently H, halogen, NO2, or CF3; R5 = Br, Cl, or NO2; R6 = H or F; R7 = Me, CRR1OH, CHO, C:NOH, COMe, or (un)substituted aryl; m = 0-1; n = 0-6] were prepared by cyclization and further reaction of 1-[2-(acylamino)phenyl]-1-phenylmethanone derivs. For example, 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)-2(1H)-quinoline (II) was synthesized in a 5-step sequence starting with acylation of 1-[2-amino-5-(trifluoromethyl)phenyl]-1'-(5-chloro-2-methoxyphenyl)methanone (preparation given) with 3-carbomethoxypropionyl chloride (82%). Subsequent cyclization (100%), dehydration (78%), demethylation (86%), and reduction of the acid yielded II. II activated the cloned BK channel mSlo expressed in *Xenopus* oocytes, increasing whole cell outward (K+) BK-mediated currents > 200% at 20  $\mu$ M. In an in vivo erectile function test on diabetic F-344 rats, II (0.1-1 mg/kg) significantly augmented intracavernous pressure/BP responses elicited by submaximal stimulation of the cavernous nerve. As BK channel openers, I are useful in the treatment of disorders which are responsive to the opening of the potassium channels, such as ischemia, stroke, convulsions, epilepsy, asthma, irritable bowel syndrome, migraine, traumatic brain injury, spinal cord injury, sexual dysfunction, and urinary incontinence.

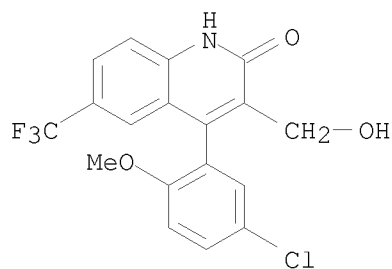
IT 275375-51-4P 275375-53-6P 275375-54-7P  
275375-56-9P 275375-59-2P 275375-62-7P  
275375-69-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 3-substituted-4-arylquinolin-2-one potassium channel openers by cyclization and further reaction of 1-[2-(acylamino)phenyl]-1-phenylmethanone derivs.)

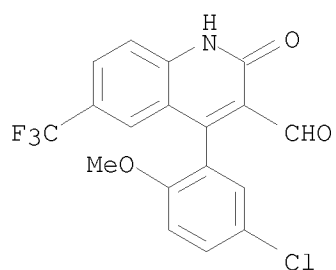
RN 275375-51-4 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-(hydroxymethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-53-6 CAPLUS

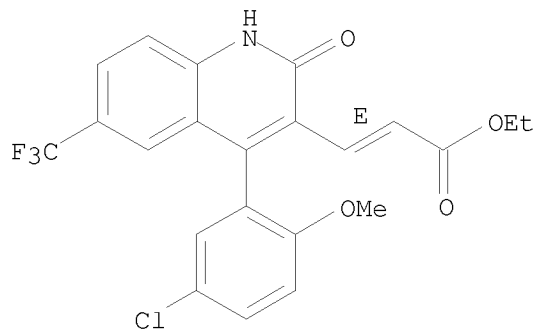
CN 3-Quinolinecarboxaldehyde, 4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-54-7 CAPLUS

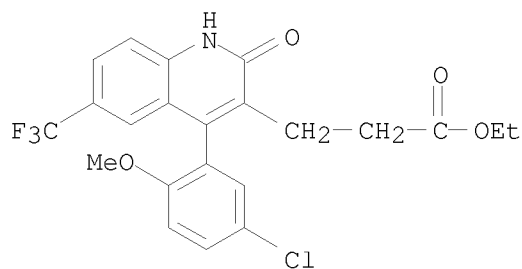
CN 2-Propenoic acid, 3-[4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-3-quinolinyl]-, ethyl ester, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



RN 275375-56-9 CAPLUS

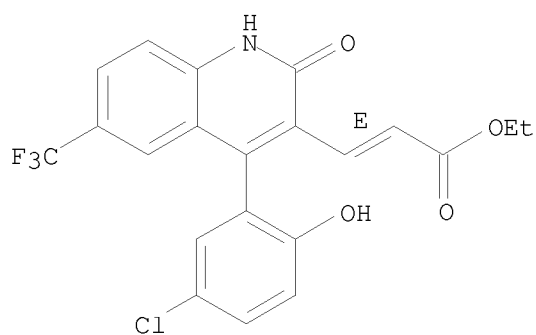
CN 3-Quinolinepropanoic acid, 4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



RN 275375-59-2 CAPLUS

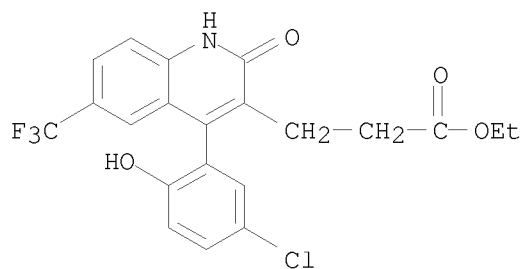
CN 2-Propenoic acid, 3-[4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-3-quinolinyl]-, ethyl ester, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



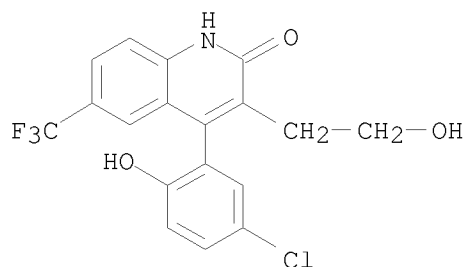
RN 275375-62-7 CAPLUS

CN 3-Quinolinepropanoic acid, 4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



RN 275375-69-4 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



IT 275375-55-8P 275375-57-0P 275375-58-1P  
 275375-60-5P 275375-61-6P 275375-63-8P  
 275375-64-9P 275375-65-0P 275375-66-1P  
 275375-67-2P 275375-68-3P 275375-70-7P  
 275375-72-9P 275375-75-2P 275375-78-5P  
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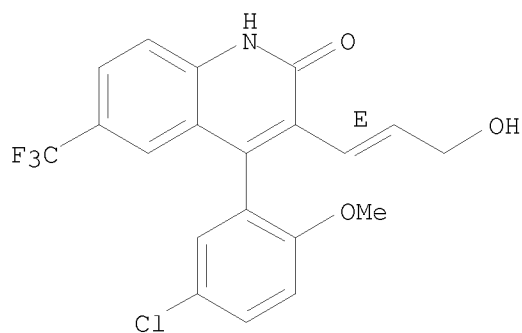
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 3-substituted-4-arylquinolin-2-one potassium channel openers by cyclization and further reaction of 1-[2-(acylamino)phenyl]-1-phenylmethanone derivs.)

RN 275375-55-8 CAPLUS

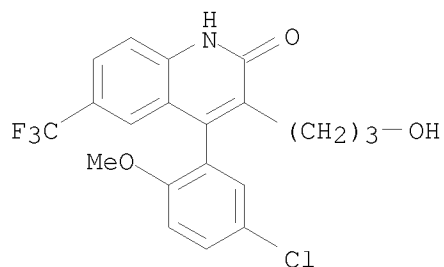
CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-[(1E)-3-hydroxy-1-propenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



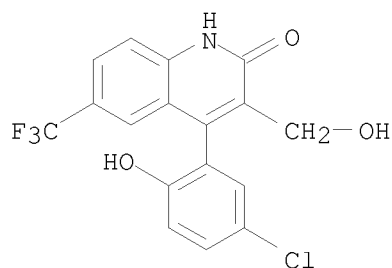
RN 275375-57-0 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-(3-hydroxypropyl)-6-(trifluoromethyl)- (CA INDEX NAME)



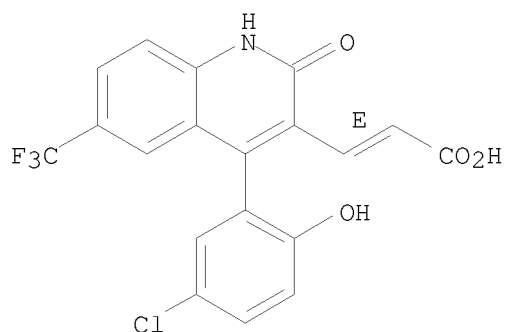


RN 275375-58-1 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(hydroxymethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



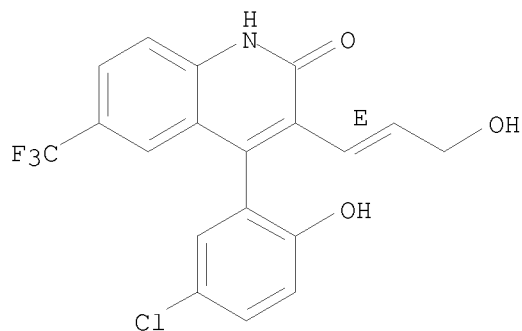
RN 275375-60-5 CAPLUS  
 CN 2-Propenoic acid, 3-[4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-3-quinolinyl]-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.

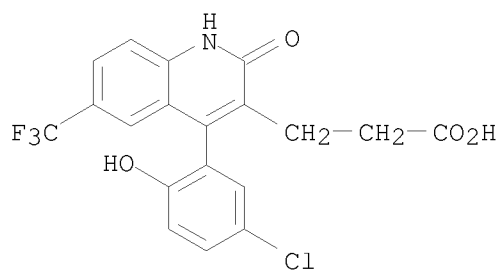


RN 275375-61-6 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-[(1E)-3-hydroxy-1-propenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

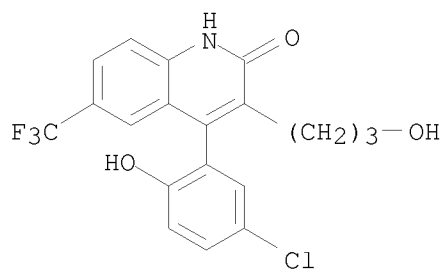


RN 275375-63-8 CAPLUS  
 CN 3-Quinolinepropanoic acid, 4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-64-9 CAPLUS

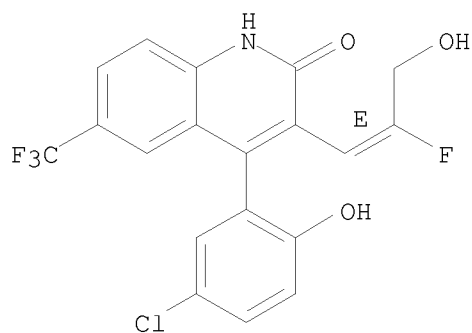
CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(3-hydroxypropyl)-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-65-0 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-[(1E)-2-fluoro-3-hydroxy-1-propenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

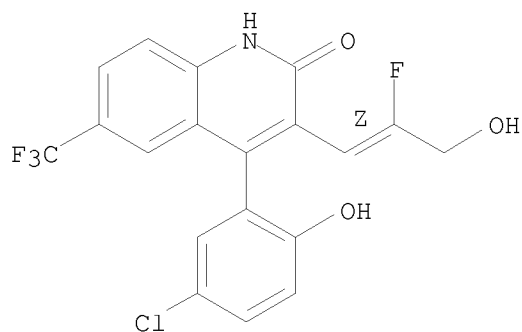
Double bond geometry as shown.



RN 275375-66-1 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-[(1Z)-2-fluoro-3-hydroxy-1-propenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

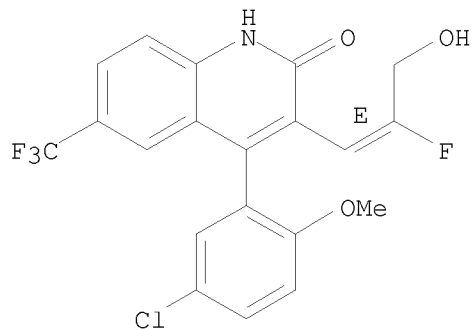
Double bond geometry as shown.



RN 275375-67-2 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-[(1E)-2-fluoro-3-hydroxy-1-propenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

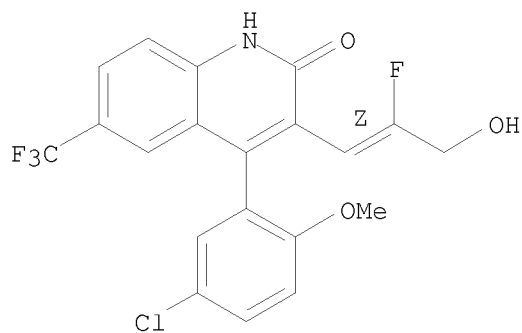
Double bond geometry as shown.



RN 275375-68-3 CAPLUS

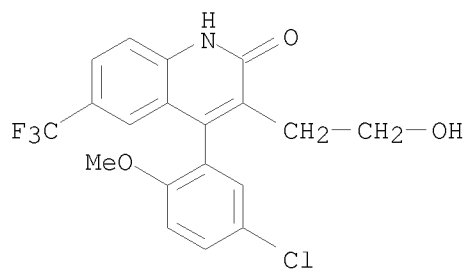
CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-[(1Z)-2-fluoro-3-hydroxy-1-propenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

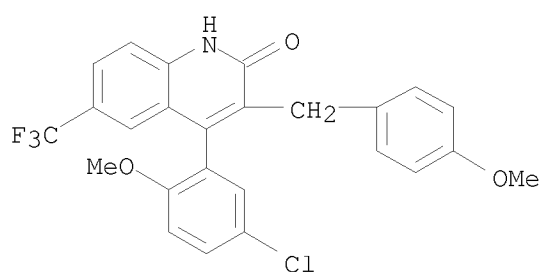


RN 275375-70-7 CAPLUS

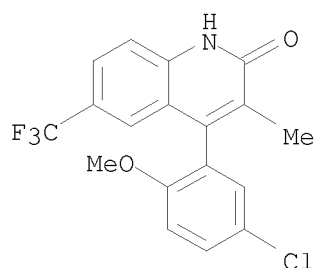
CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



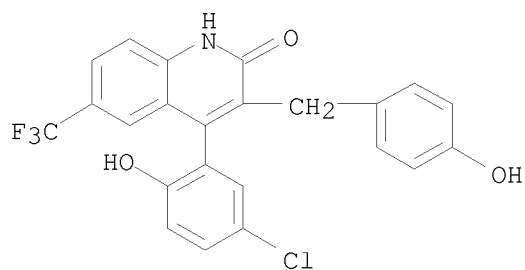
RN 275375-72-9 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-[(4-methoxyphenyl)methyl]-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-75-2 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-methyl-6-(trifluoromethyl)- (CA INDEX NAME)

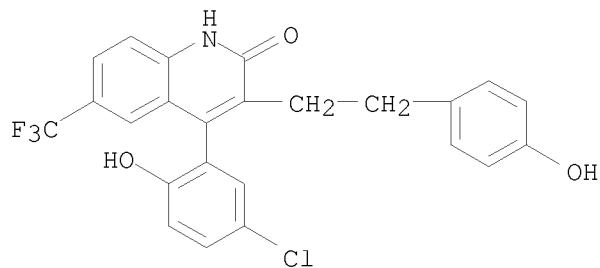


RN 275375-78-5 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-[(4-hydroxyphenyl)methyl]-6-(trifluoromethyl)- (CA INDEX NAME)



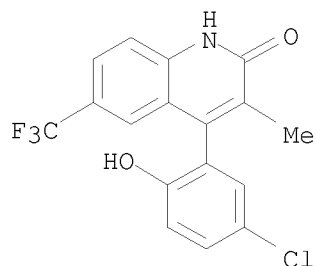
RN 275375-81-0 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-[2-(4-

hydroxyphenyl)ethyl]-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-82-1 CAPLUS

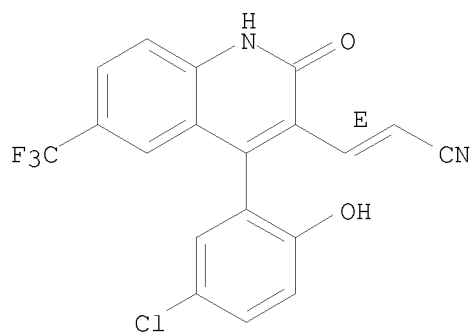
CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-methyl-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-83-2 CAPLUS

CN 2-Propenenitrile, 3-[4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-3-quinolinyl]-, (2E)- (CA INDEX NAME)

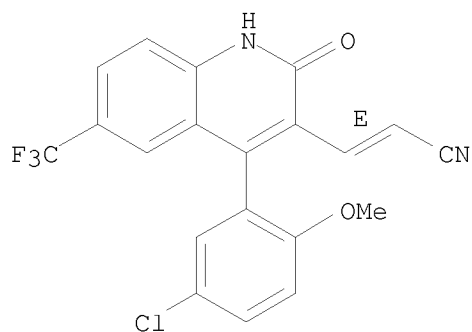
Double bond geometry as shown.



RN 275375-84-3 CAPLUS

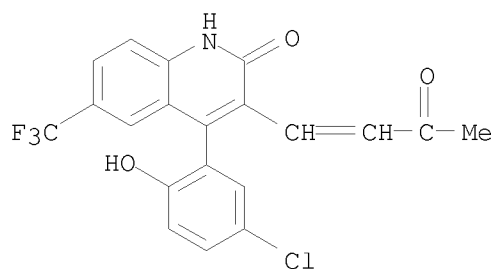
CN 2-Propenenitrile, 3-[4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-3-quinolinyl]-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



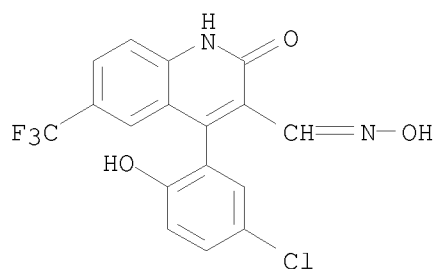
RN 275375-85-4 CAPLUS

CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(3-oxo-1-butenyl)-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



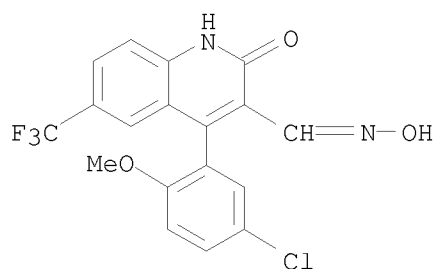
RN 275375-86-5 CAPLUS

CN 3-Quinolinecarboxaldehyde, 4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-, 3-oxime (CA INDEX NAME)

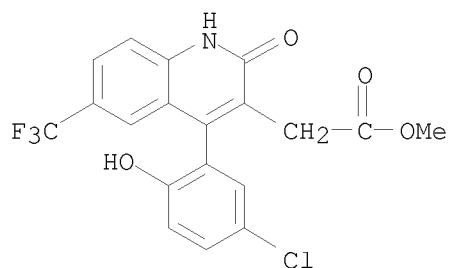


RN 275375-87-6 CAPLUS

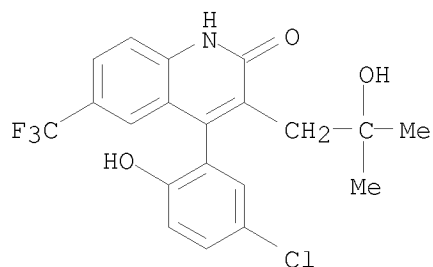
CN 3-Quinolinecarboxaldehyde, 4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-, 3-oxime (CA INDEX NAME)



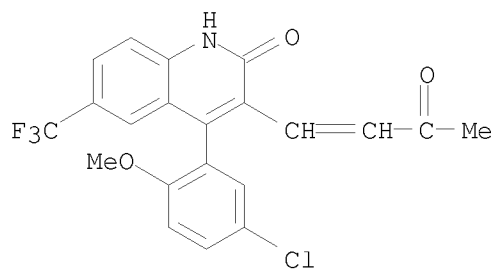
RN 275375-88-7 CAPLUS  
 CN 3-Quinolineacetic acid, 4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-(trifluoromethyl)-, methyl ester (CA INDEX NAME)



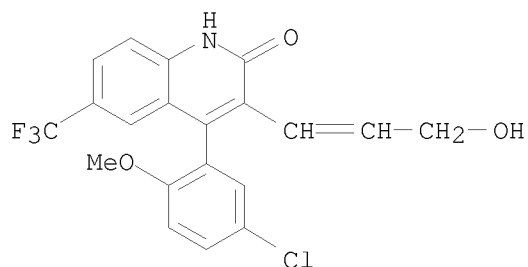
RN 275375-89-8 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxy-2-methylpropyl)-6-(trifluoromethyl)- (CA INDEX NAME)



RN 275375-92-3 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-(3-oxo-1-butenyl)-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 275375-93-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-methoxyphenyl)-3-(3-hydroxy-1-propenyl)-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



IT 275375-99-0P 275376-02-8P 275376-03-9P  
275376-05-1P

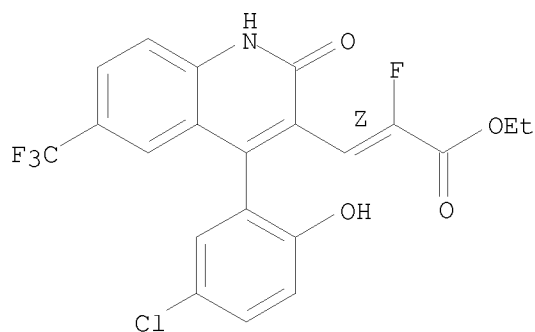
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation of 3-substituted-4-arylquinolin-2-one potassium channel openers  
by cyclization and further reaction of 1-[2-(acylamino)phenyl]-1-  
phenylmethanone derivs.)

RN 275375-99-0 CAPLUS

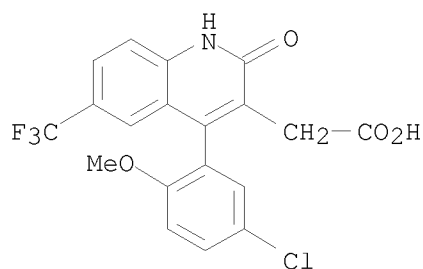
CN 2-Propenoic acid, 3-[4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-  
(trifluoromethyl)-3-quinolinyl]-2-fluoro-, ethyl ester, (2Z)- (CA INDEX  
NAME)

Double bond geometry as shown.



RN 275376-02-8 CAPLUS

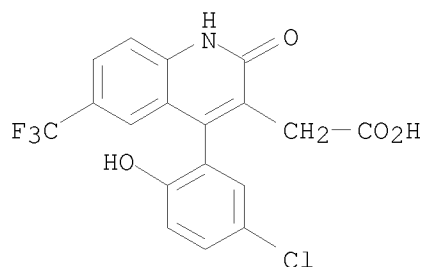
CN 3-Quinolineacetic acid, 4-(5-chloro-2-methoxyphenyl)-1,2-dihydro-2-oxo-6-  
(trifluoromethyl)- (CA INDEX NAME)



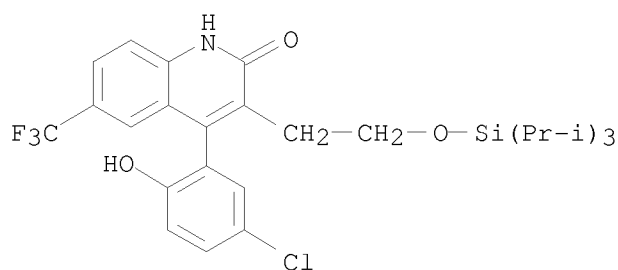
RN 275376-03-9 CAPLUS

CN 3-Quinolineacetic acid, 4-(5-chloro-2-hydroxyphenyl)-1,2-dihydro-2-oxo-6-  
(trifluoromethyl)- (CA INDEX NAME)





RN 275376-05-1 CAPLUS  
 CN 2(1H)-Quinolinone, 4-(5-chloro-2-hydroxyphenyl)-6-(trifluoromethyl)-3-[2-[[tris(1-methylethyl)silyl]oxy]ethyl]- (CA INDEX NAME)

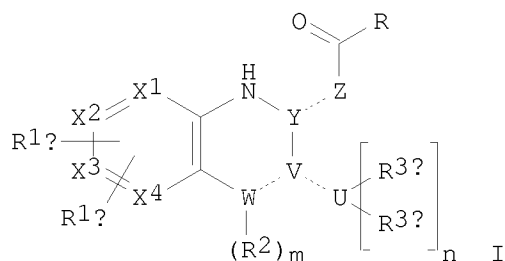


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 89 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000:376824 CAPLUS  
 DOCUMENT NUMBER: 133:26858  
 TITLE: Insulin secretion promoters and antidiabetic agents containing condensed pyrazine derivatives  
 INVENTOR(S): Kamisaka, Noriaki; Raku, Naomi; Ueno, Kimihisa; Nomoto, Yuji; Takasaki, Kotaro; Suda, Miho; Kusaka, Hideaki; Yano, Hiroshi; Nakanishi, Satoshi; Matsuda, Yuzuru  
 PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 74 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000154139	A	20000606	JP 1999-259685	19990914
PRIORITY APPLN. INFO.:			JP 1998-261592	A 19980916
OTHER SOURCE(S):	MARPAT	133:26858		

GI

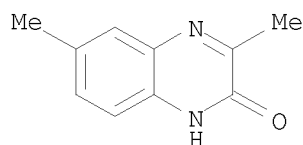


AB Insulin secretion promoters and antidiabetic agents contain the derivs. I  
 [R1A, R1B = H, lower alkyl, lower alkoxy, lower alkanoyloxy, lower  
 alkylthio, halo, NO<sub>2</sub>, lower alkanoyl, lower alkoxy carbonyl, NR<sub>4</sub>R<sub>5</sub> [R<sub>4</sub>, R<sub>5</sub>  
 = H, (un)substituted lower alkyl or NR<sub>4</sub>R<sub>5</sub> = (un)substituted heterocyclyl],  
 NHCOR<sub>6</sub> [R<sub>6</sub> = (un)substituted lower alkyl], CONR<sub>4</sub>aR<sub>5</sub>a (R<sub>4</sub>a, R<sub>5</sub>a = any group  
 given for R<sub>4</sub> and R<sub>5</sub>); R = H, (un)substituted alkyl, (un)substituted  
 cycloalkyl, (un)substituted aryl, (un)substituted heterocyclyl; X<sub>1</sub>-X<sub>4</sub> =  
 CH, N; m, n = 0, 1; WVU = NC(:O), N:CN; if WVU = NC(:O) (automatically m =  
 2 and n = 0), then YZ = CHCH<sub>2</sub>, C:CH, R<sub>2</sub> = H, (un)substituted lower alkyl,  
 (un)substituted cycloalkyl, (un)substituted lower alkenyl, (un)substituted  
 alkynyl, (un)substituted aryl, (un)substituted aralkyl, (un)substituted  
 heterocyclyl; if WVU = N:CN (automatically m = 0 and n = 1), then YZ =  
 C:CH, R<sub>3</sub>A, R<sub>3</sub>B = H, (un)substituted lower alkyl, (un)substituted  
 cycloalkyl, (un)substituted aryl, (un)substituted aralkyl, (un)substituted  
 heterocyclyl, or NR<sub>3</sub>AR<sub>3</sub>B = (un)substituted heterocyclyl] or their  
 pharmacol. acceptable salts as active ingredients. 1-Methyl-3-(2-  
 oxophenethyl)-3,4-dihydro-1H-quinoxalin-2-one (prepared from  
 1,2-phenylenediamine and Et 3-benzoylacrylate with 2 steps) suppressed  
 increase in blood glucose after glucose loading to SD rats.

IT 28082-84-0 108833-49-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of condensed pyrazine compds. as insulin secretion promoters  
 and antidiabetic drugs)

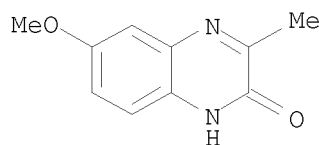
RN 28082-84-0 CAPLUS

CN 2(1H)-Quinoxalinone, 3,6-dimethyl- (CA INDEX NAME)



RN 108833-49-4 CAPLUS

CN 2(1H)-Quinoxalinone, 6-methoxy-3-methyl- (CA INDEX NAME)



TITLE: Synthesis of novel 3-acyloxy-1,3-dihydro-2H-indol-2-ones and isomeric 4-acyl-1,4-dihydro-3,1-benzoxazin-2-ones: double rearrangement of 3-hydroxyquinoline-2,4(1H,3H)-diones

AUTHOR(S): Klasek, Antonin; Koristek, Kamil; Polis, Jiri; Kosmrlj, Janez

CORPORATE SOURCE: Department of Chemistry and Environmental Technology, Faculty of Technology, Technical University of Brno, Zlin, 762 72, Czech Rep.

SOURCE: Tetrahedron (2000), 56(11), 1551-1560  
CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

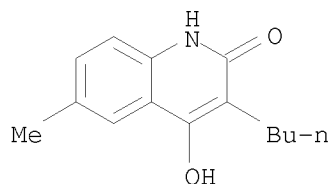
OTHER SOURCE(S): CASREACT 132:321837

AB Substituted 3-hydroxyquinoline-2,4(1H,3H)-diones were transformed into 3-acyloxy-1,3-dihydro-2H-indol-2-ones and isomeric 4-acyl-1,4-dihydro-3,1-benzoxazin-2-ones. The influence of the substituents and the reaction conditions on the course of the reaction was studied. In the proposed mechanism, a double rearrangement takes place;  $\alpha$ -ketol rearrangement, leading to a  $\alpha$ -hydroxy  $\beta$ -diketone intermediate, is followed by a rearrangement to the isomeric  $\alpha$ -ketol esters.

IT 266348-50-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of hydroindolones and hydrobenzoxazinones by double rearrangement of hydroxyquinolinediones)

RN 266348-50-9 CAPLUS

CN 2(1H)-Quinolinone, 3-butyl-4-hydroxy-6-methyl- (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 91 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:125660 CAPLUS

DOCUMENT NUMBER: 132:279186

TITLE: Synthesis of quinoxaline derivatives bearing the styryl and phenylethynyl groups and application to a fluorescence derivatization reagent

AUTHOR(S): Katoh, Akira; Yoshida, Tohru; Ohkanda, Junko

CORPORATE SOURCE: Department of Industrial Chemistry, Faculty of Engineering, Seikei University, Musashino, 180-8633, Japan

SOURCE: Heterocycles (2000), 52(2), 911-920

CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:279186

AB The cross-coupling of 2-chloro-6-methoxycarbonyl-3-methylquinoxaline and 3-chloro-7-methoxy-1-methylquinoxalin-2(1H)-one with PhC.tplbond.CH in the presence of Pd(PPh3)4 gave 6-methoxycarbonyl-3-methyl-2-

(phenylethynyl)quinoxaline and 7-methoxy-1-methyl-3-[4-(methoxycarbonyl)phenylethynyl]quinoxalin-2(1H)-one, resp. Subsequent conversion into the corresponding olefinic compds., 6-methoxycarbonyl-3-methyl-2-styrylquinoxaline and 7-methoxy-1-methyl-3-[4-(methoxycarbonyl)styryl]quinoxalin-2(1H)-one, was achieved by partial hydrogenation on Pd catalysts such as Lindlar catalyst and Pd/BaSO<sub>4</sub>-quinoline, but the conformation of the resulting olefins was unexpectedly E-form. These quinoxalines showed fluorescent emission bands between 398-467 nm in MeCN when the excitation wavelength of 353-405 nm was applied. Further, 3-[4-(chlorocarbonyl)phenylethynyl]-7-methoxy-1-methylquinoxalin-2(1H)-one was demonstrated to be applicable to a fluorescence derivatization reagent for amines.

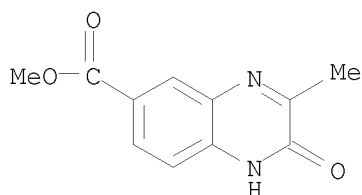
IT 263715-86-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of quinoxalines bearing styryl and phenylethynyl groups and application to fluorescence derivatization reagent)

RN 263715-86-2 CAPLUS

CN 6-Quinoxalinecarboxylic acid, 1,2-dihydro-3-methyl-2-oxo-, methyl ester (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 92 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:97566 CAPLUS

DOCUMENT NUMBER: 132:237062

TITLE: Heterocyclic compounds with sulfone functional groups. II. Synthesis of 1-arenesulfonyl-2-quinoxalinones

AUTHOR(S): Hong, Young-Seuk; Kim, Hyun-Muk; Park, Yong-Tae; Kim, Ho-Sik

CORPORATE SOURCE: Department of Chemistry, Keimyung University, Taegu, 704-701, S. Korea

SOURCE: Bulletin of the Korean Chemical Society (2000), 21(1), 133-136

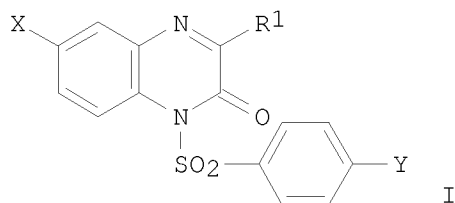
CODEN: BKCSDE; ISSN: 0253-2964

PUBLISHER: Korean Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

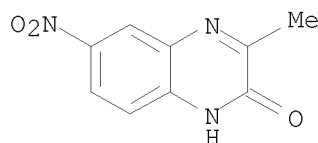


AB Title compds. I (R1, Y = Me, H; X = H, Me, NO2, Cl) were prepared by reaction of 2(1H)-quinoxalinones with benzenesulfonyl chlorides and of 1-chloro-2(1H)-quinoxalinones with Na benzenesulfonates.

IT 19801-10-6P 28082-84-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of 1-arenesulfonyl-2-quinoxalinones)

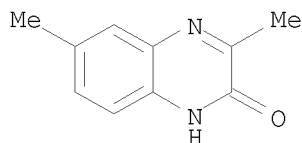
RN 19801-10-6 CAPLUS

CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)



RN 28082-84-0 CAPLUS

CN 2(1H)-Quinoxalinone, 3,6-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 93 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:348900 CAPLUS

DOCUMENT NUMBER: 131:102258

TITLE: Preparation and biological evaluation of 6/7-trifluoromethyl(nitro)-, 6,7-difluoro-3-alkyl (aryl)-substituted-quinoxalin-2-ones. Part 3

AUTHOR(S): Sanna, Paolo; Carta, Antonio; Loriga, Mario; Zanetti, Stefania; Sechi, Leonardo

CORPORATE SOURCE: Dipartimento Farmaco Chimico Tossicologico, Sassari, I-07100, Italy

SOURCE: Farmaco (1999), 54(3), 169-177

CODEN: FRMCE8; ISSN: 0014-827X

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A new series of quinoxalinones 6/7-trifluoromethyl or nitro- and 6,7-difluoro substituted bearing various side-chains (alkyl, haloalkyl, benzyl and Ph groups) at C-3 of the ring system was synthesized and submitted to preliminary in vitro evaluation for antibacterial, antifungal, antimycobacterial, anticancer and anti-HIV activities.

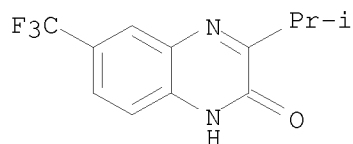
IT 231607-59-3P 231607-63-9P 231607-66-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

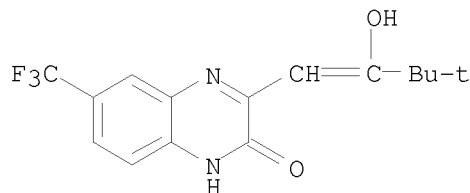
(preparation and biol. evaluation of quinoxalinones)

RN 231607-59-3 CAPLUS

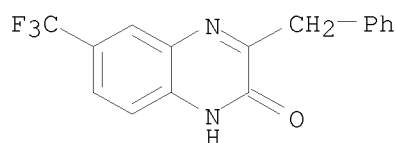
CN 2(1H)-Quinoxalinone, 3-(1-methylethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



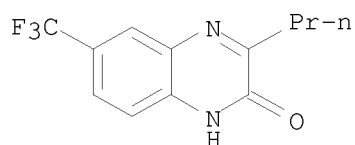
RN 231607-63-9 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-(2-hydroxy-3,3-dimethyl-1-butenyl)-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



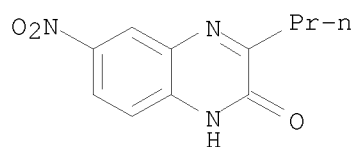
RN 231607-66-2 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-(phenylmethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



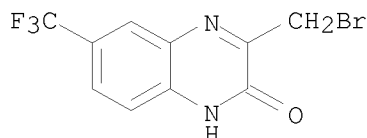
IT 231607-54-8P 231607-56-0P 231607-72-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and biol. evaluation of quinoxalinones)  
 RN 231607-54-8 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-propyl-6-(trifluoromethyl)- (CA INDEX NAME)



RN 231607-56-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-nitro-3-propyl- (CA INDEX NAME)



RN 231607-72-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-(bromomethyl)-6-(trifluoromethyl)- (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 94 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:348899 CAPLUS

DOCUMENT NUMBER: 131:102257

TITLE: Synthesis of 3,6,7-substituted 2-quinoxalinones for evaluation of antimicrobial and anticancer activity. Part 2

AUTHOR(S): Sanna, Paolo; Carta, Antonio; Loriga, Mario; Zanetti, Stefania; Sechi, Leonardo

CORPORATE SOURCE: Dipartimento Farmaco Chimico Tossicologico, Sassari, I-07100, Italy

SOURCE: Farmaco (1999), 54(3), 161-168

CODEN: FRMCE8; ISSN: 0014-827X

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:102257

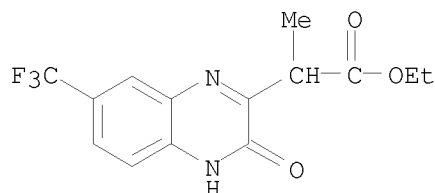
AB A new set of 35 3-alkyl and 3-[(ethoxycarbonyl)alkyl] 6- and/or 7-substituted 2-quinoxalinones was prepared and submitted to a preliminary in vitro investigation of their antimicrobial, anticancer and anti-HIV activities. Only poor or moderate activities were observed

IT 230953-77-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (preparation of 3,6,7-substituted 2-quinoxalinones for evaluation of antimicrobial and anticancer activity)

RN 230953-77-2 CAPLUS

CN 2-Quinoxalineacetic acid, 3,4-dihydro- $\alpha$ -methyl-3-oxo-7-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)

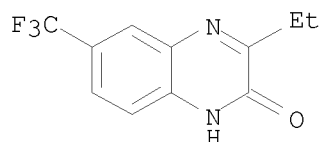


IT 230953-88-5P

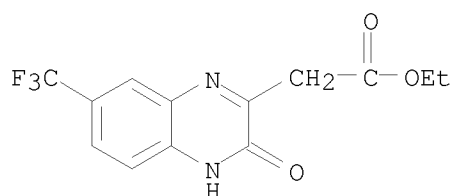
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation of 3,6,7-substituted 2-quinoxalinones for evaluation of antimicrobial and anticancer activity)

RN 230953-88-5 CAPLUS

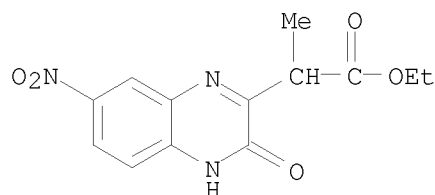
CN 2(1H)-Quinoxalinone, 3-ethyl-6-(trifluoromethyl)- (CA INDEX NAME)



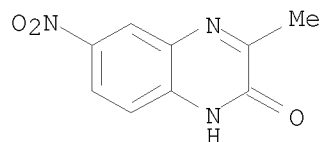
IT 230953-70-5P 230953-79-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of 3,6,7-substituted 2-quinoxalinones for evaluation of antimicrobial and anticancer activity)  
 RN 230953-70-5 CAPLUS  
 CN 2-Quinoxalineacetic acid, 3,4-dihydro-3-oxo-7-(trifluoromethyl)-, ethyl ester (CA INDEX NAME)



RN 230953-79-4 CAPLUS  
 CN 2-Quinoxalineacetic acid, 3,4-dihydro- $\alpha$ -methyl-7-nitro-3-oxo-, ethyl ester (CA INDEX NAME)

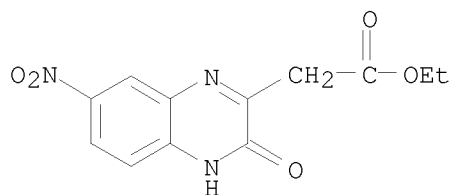


IT 19801-10-6P 67557-72-6P 98416-70-7P  
 230953-90-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of 3,6,7-substituted 2-quinoxalinones for evaluation of antimicrobial and anticancer activity)  
 RN 19801-10-6 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)

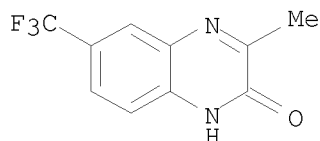


RN 67557-72-6 CAPLUS  
 CN 2-Quinoxalineacetic acid, 3,4-dihydro-7-nitro-3-oxo-, ethyl ester (CA INDEX NAME)

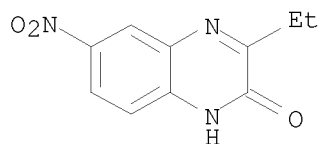




RN 98416-70-7 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-methyl-6-(trifluoromethyl)- (CA INDEX NAME)

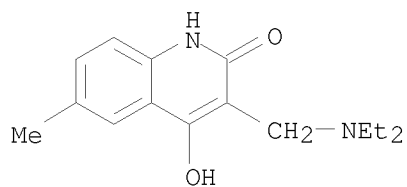


RN 230953-90-9 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-ethyl-6-nitro- (CA INDEX NAME)



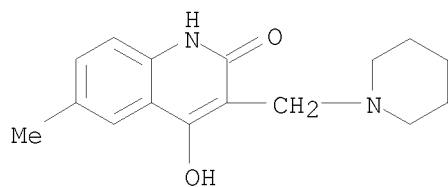
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 95 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:180634 CAPLUS  
 DOCUMENT NUMBER: 130:281972  
 TITLE: 4-Hydroxycarboystyrils: a synthetic study  
 AUTHOR(S): Jha, I. S.; Kanth, A. K.; Singh, L.  
 CORPORATE SOURCE: Department of Chemistry, L.N. Mithila University,  
 Darbhanga, 846 004, India  
 SOURCE: Oriental Journal of Chemistry (1998), 14(3), 489-490  
 CODEN: OJCHEG; ISSN: 0970-020X  
 PUBLISHER: Oriental Scientific Publishing Co.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Mannich bases of 4-hydroxycarboystyrils have been prepared  
 IT 222614-60-0P 222614-61-1P 222614-62-2P  
 222614-63-3P 222614-72-4P 222614-73-5P  
 222614-74-6P 222614-75-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of Mannich bases of hydroxycarboystyrils)  
 RN 222614-60-0 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[(diethylamino)methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)



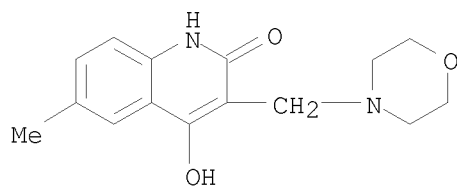
RN 222614-61-1 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(1-piperidinylmethyl)- (CA INDEX NAME)



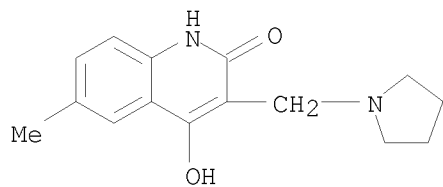
RN 222614-62-2 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(4-morpholinylmethyl)- (CA INDEX NAME)



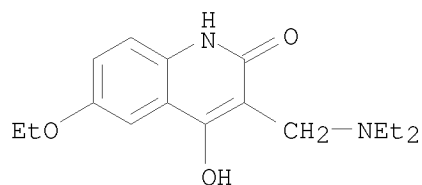
RN 222614-63-3 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(1-pyrrolidinylmethyl)- (CA INDEX NAME)

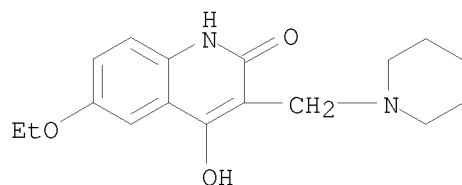


RN 222614-72-4 CAPLUS

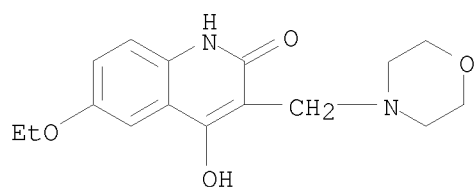
CN 2(1H)-Quinolinone, 3-[(diethylamino)methyl]-6-ethoxy-4-hydroxy- (CA INDEX NAME)



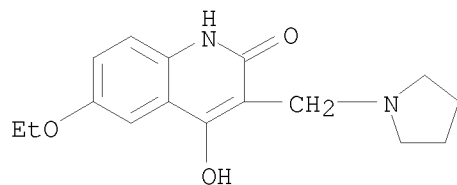
RN 222614-73-5 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-4-hydroxy-3-(1-piperidinylmethyl)- (CA INDEX NAME)



RN 222614-74-6 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-4-hydroxy-3-(4-morpholinylmethyl)- (CA INDEX NAME)



RN 222614-75-7 CAPLUS  
 CN 2(1H)-Quinolinone, 6-ethoxy-4-hydroxy-3-(1-pyrrolidinylmethyl)- (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

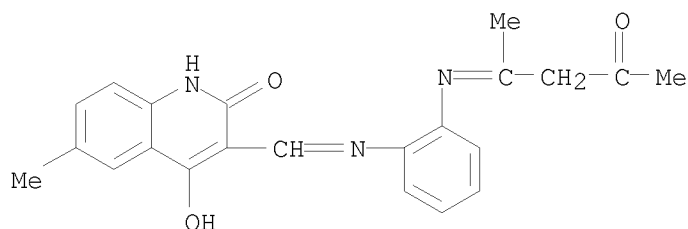
L28 ANSWER 96 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:124112 CAPLUS  
 DOCUMENT NUMBER: 130:231368  
 TITLE: Novel asymmetric tetradentate Schiff base ligands derived from 6-methyl-3-formyl-4-hydroxy-2-(1H)-quinolone and their metal complexes  
 AUTHOR(S): Emara, Adel A. A.

CORPORATE SOURCE: Department of Chemistry, Faculty of Education, Ain  
Shams University, Cairo, Egypt  
SOURCE: Synthesis and Reactivity in Inorganic and  
Metal-Organic Chemistry (1999), 29(1), 87-103  
CODEN: SRIMCN; ISSN: 0094-5714  
PUBLISHER: Marcel Dekker, Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 130:231368

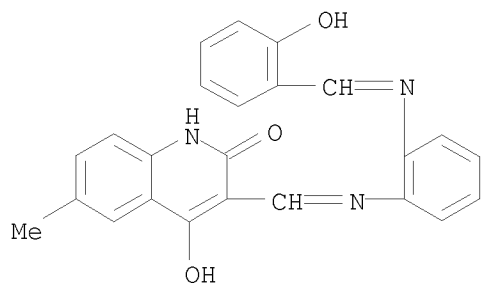
AB Novel asym., tetradentate, dibasic Schiff base ligands were synthesized by the condensation of the half-unit Schiff base ligand 3-[o-aminophenyliminomethyl]-4-hydroxy-6-methyl-2-(1H)-quinolone with acetylacetone and salicylaldehyde. Cu(II), Ni(II), UO<sub>2</sub>(VI) and Fe(III) complexes of both ligands were prepared using different salts in the case of Cu(II) and Ni(II) cations. The structures of the ligands and the complexes were elucidated by chemical analyses, IR, UV-visible, mass spectra and magnetic moment measurements. Both Cu(II) and Ni(II) cations are initially coordinated to the N2O2 coordinating sites of the ligands. The Cu(II) complexes were either square-planar mononuclear compds., [LCu].xH<sub>2</sub>O, or dinuclear compds., [LCu<sub>2</sub>(OAc)<sub>2</sub>], where both square-planar and octahedral geometries exist in the same complex mol., while the Ni(II) complexes were either diamagnetic square-planar or paramagnetic compds. where both octahedral and square-planar geometries do exist, indicating their anomalous behavior. Both UO<sub>2</sub>(VI) and Fe(III) cations are initially coordinated to the outer O-O atoms of the ligand mol.(s). The uranyl complex of the ligand H<sub>2</sub>La is coordinated to two ligand mols. while that of ligand H<sub>2</sub>Lb is coordinated to only one ligand mol. and to a bidentate acetate group. The Fe(III) complexes are dinuclear where each Fe(III) cation is linked to only one ligand mol. and the two Fe(III) cations are bridged through two Cl atoms. The geometry of the uranyl complexes are pentagonal bipyramidal while the Fe(III) complexes are octahedral.

IT 221055-78-3P 221055-79-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(for preparation of transition metal Schiff base complexes)

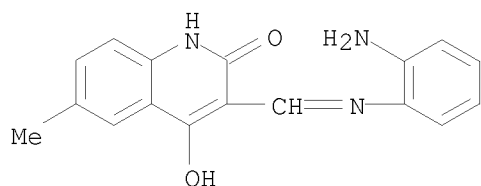
RN 221055-78-3 CAPLUS  
CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-[[[2-[(1-methyl-3-oxobutylidene)amino]phenyl]imino]methyl]- (CA INDEX NAME)



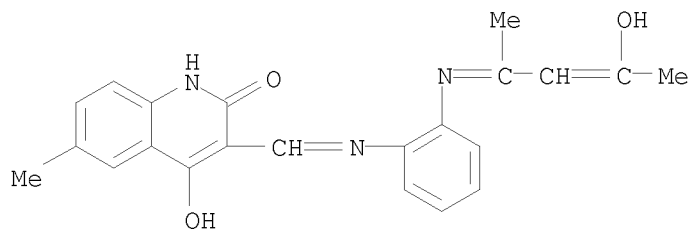
RN 221055-79-4 CAPLUS  
CN 2(1H)-Quinolinone, 4-hydroxy-3-[[[2-[[[2-(hydroxyphenyl)methylene]amino]phenyl]imino]methyl]-6-methyl]- (CA INDEX NAME)



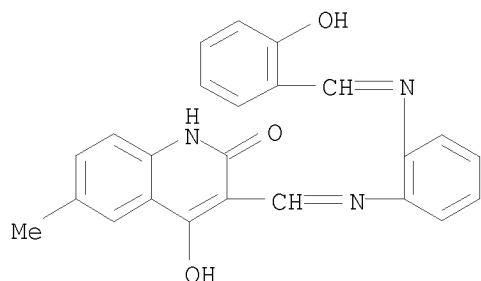
IT 193528-38-0, 3-[o-Aminophenyliminomethyl]-4-hydroxy-6-methyl-2-(1H)-quinolone  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (for preparation of transition metal formylhydroxyquinolone acetylacetone salicylaldehyde Schiff base complexes)  
 RN 193528-38-0 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[[2-aminophenyl]imino]methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)



IT 221055-76-1DP, uranyl aqua complexes 221055-79-4DP, uranyl aqua complexes  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and coordination geometry of)  
 RN 221055-76-1 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-3-[[[2-[(3-hydroxy-1-methyl-2-butenylidene)amino]phenyl]imino]methyl]-6-methyl- (9CI) (CA INDEX NAME)



RN 221055-79-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-3-[[[2-[(2-hydroxyphenyl)methylene]amino]phenyl]imino]methyl]-6-methyl- (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 97 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:467855 CAPLUS

DOCUMENT NUMBER: 129:189228

TITLE: 4-Hydroxycarbostyryl: Part II. Studies on bromination of 3-alkyl/benzyl-4-hydroxycarbostyryls

AUTHOR(S): Jha, I. S.; Choudhary, C.; Jha, A. S.; Kanth, A. K.; Jha, S. S.

CORPORATE SOURCE: Department Chemistry, L. N. Mithila University, Bihar, 846 004, India

SOURCE: Oriental Journal of Chemistry (1998), 14(1), 147-148  
CODEN: OJCHEG; ISSN: 0970-020X

PUBLISHER: Oriental Scientific Publishing Co.

DOCUMENT TYPE: Journal

LANGUAGE: English

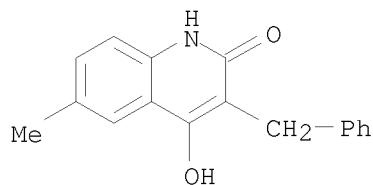
AB Bromination of 3-alkyl/benzyl-4-hydroxycarbostyryls with anhydrous cupric bromide or Ph tri-Me ammonium perbromide affords 3-bromo derivs. For example, refluxing 3,6-dimethyl-4-hydroxycarbostyryl with cupric bromide in CHCl<sub>3</sub> for 3 h gave the corresponding 3-bromo derivative

IT 108973-32-6P 211859-18-6P 211859-20-0P  
211859-21-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(bromination of 3-alkyl/benzyl-4-hydroxycarbostyryls)

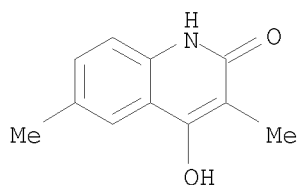
RN 108973-32-6 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(phenylmethyl)- (CA INDEX NAME)

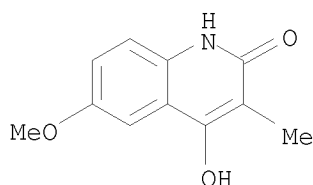


RN 211859-18-6 CAPLUS

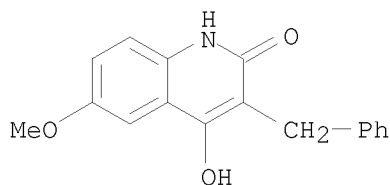
CN 2(1H)-Quinolinone, 4-hydroxy-3,6-dimethyl- (CA INDEX NAME)



RN 211859-20-0 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-methyl- (CA INDEX NAME)

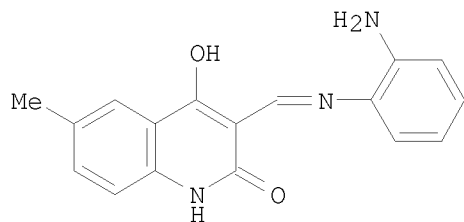


RN 211859-21-1 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-(phenylmethyl)- (CA INDEX NAME)



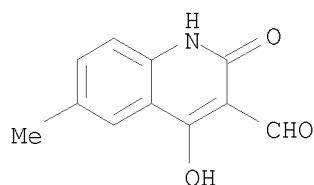
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 98 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1997:477731 CAPLUS  
 DOCUMENT NUMBER: 127:170611  
 TITLE: A novel type half-unit Schiff base ligand,  
 3-[o-aminophenyliminomethyl]-4-hydroxy-6-methyl-2-(1H)-  
 quinolone and its metal complexes. Part IV  
 AUTHOR(S): Khalil, Saied M. E.; Taha, Ali; Abd El-Hameed, Faten  
 S. M.  
 CORPORATE SOURCE: Department of Chemistry, Faculty of Education,  
 Ain-Shams University, Cairo, Egypt  
 SOURCE: Synthesis and Reactivity in Inorganic and  
 Metal-Organic Chemistry (1997), 27(6), 887-906  
 CODEN: SRIMCN; ISSN: 0094-5714  
 PUBLISHER: Dekker  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 127:170611  
 GI

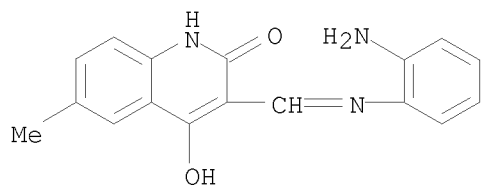


I

- AB A novel half-unit Schiff base ligand I derived from 6-methyl-3-formyl-4-hydroxy-2-(1H)-quinolone and o-phenylenediamine was prepared. The Schiff base acts as a monobasic ligand. Metal complexes  $[MLX]_2$ ,  $M = Cu(II)$ ,  $Ni(II)$  or  $Fe(III)$ ;  $X = Cl$  or  $OAc$  were obtained by the reaction of metal acetates or chlorides with the ligand, with the ligand behaving as a terdentate. However, the reaction of  $M(ClO_4)_2 \cdot 6H_2O$ ,  $M = Cu(II)$  or  $Ni(II)$ ,  $VOSO_4$  and  $UO_2(OAc)_2 \cdot 2H_2O$  with the ligand, yielded  $[ML_2]$ , where the ligand behaves as a bidentate. The ligand and its metal complexes were characterized by elemental analyses, UV-visible, IR and mass spectra. Also, magnetic susceptibilities of the metal complexes were determined.
- IT 156992-48-2, 3-Formyl-4-hydroxy-6-methyl-2(1H)-quinolone  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (for preparation of half-unit Schiff base ligand  
 (aminophenyliminomethyl)hydroxyquinolone)
- RN 156992-48-2 CAPLUS
- CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



- IT 193528-38-0P, 3-[o-Aminophenyliminomethyl]-4-hydroxy-6-methyl-2-(1H)-quinolone  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (for preparation of metal complexes of half-unit Schiff base  
 (aminophenyliminomethyl)hydroxyquinolone)
- RN 193528-38-0 CAPLUS
- CN 2(1H)-Quinolinone, 3-[[2-aminophenyl]imino]methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)





L28 ANSWER 99 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:624080 CAPLUS

DOCUMENT NUMBER: 125:269024

TITLE: Synthesis and properties of new fluorogenic substrates for peroxidase

AUTHOR(S): Li, Yuanzong; Townshend, Alan; Gao, Jun; Liu, Hongei; Chang, Wenbao; Ci, Yunxiang

CORPORATE SOURCE: Inst. of Chemistry and Molecular Engineering, Peking Univ., Beijing, 100871, Peop. Rep. China

SOURCE: Fushun Shiyou Xueyuan Xuebao (1996), 16(3), 61-63  
CODEN: FSXEE8; ISSN: 1005-3883

PUBLISHER: Fushun Shiyou Xueyuan Xuebao Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Four 3,4-dihydroquinoxalin-2(1H)-one derivs., i.e., 3,4-dihydroquinoxalin-2(1H)-one (DHQ), 3-methyl-3,4-dihydroquinoxalin-2(1H)-one (MDHQ), 3,4-dihydroquinoxalin-2(1H)-one -6-acid, 3-methyl-3,4-dihydroquinoxalin-2(1H)-one-6-acid, and N,N'-dicyanomethyl-O-phenylenediamine (DCM-OPA) were synthesized as potential substrates for horseradish peroxidase (HRP). Among these compds. DCM-OPA, DHQ and MDHQ can be prepared by very simple methods in a pure form in large quantities. Their properties for use as fluorogenic substrates for HRP and its mimetic enzyme hemin were comparatively studied with com. available substrates, i.e., p-hydroxyphenylacetic acid (p-HPA), p-hydroxypropionic acid (p-HPPA), homovanillic acid (HVA) and tyramine, by a flow injection method. The results showed that DCM-OPA and MDHQ are the best among the five synthesized substrates, and p-HPPA and p-HPA are better than HVA and tyramine. Substrates p-HPPA, p-HPA, DCM-OPA and MDHQ showed comparable ability for H<sub>2</sub>O<sub>2</sub> detection in HRP and hemin catalyzed reaction systems with the lowest detection limits in the range of 1.apprx.10 nmol/L region. For the detection of enzyme DCM-OPA is the most sensitive one of all the substrates studied. The stability of DCM-OPA is better than MDHQ, and both of them are stable at least for a month in a refrigerator.

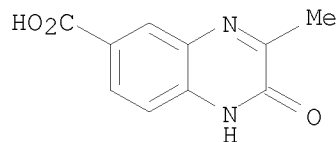
IT 103752-83-6P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(as substrate; synthesis and properties of new fluorogenic substrates for peroxidase)

RN 103752-83-6 CAPLUS

CN 6-Quinoxalinecarboxylic acid, 1,2-dihydro-3-methyl-2-oxo- (CA INDEX NAME)



L28 ANSWER 100 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:304552 CAPLUS

DOCUMENT NUMBER: 125:86529

TITLE: Synthesis of furo and pyrano-quinolines

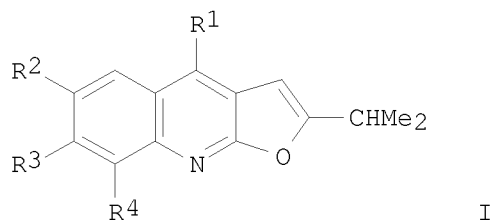
AUTHOR(S): Gunasekaran, C.; Prasad, K.J. Rajendra

CORPORATE SOURCE: Department of Chemistry, Bharathiar University, Coimbatore, 641 046, India

SOURCE: Indian Journal of Heterocyclic Chemistry (1996), 5(3), 169-172

CODEN: IJCHEI; ISSN: 0971-1627

PUBLISHER: Lucknow University, Dep. of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 125:86529  
 GI



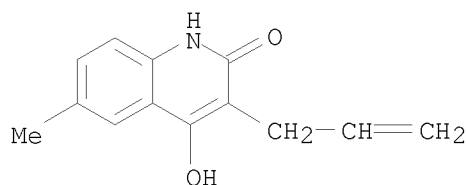
AB Prevost reaction of 3-prenyl-2-quinolinones using mercuric oxide and iodine in glacial acetic acid affords the furo[2,3-b]quinolines I [R1 = Ph, OMe, R2-R4 = H; R = C6H4OMe-4, R2 = Cl, R3, R4 = H; R1, R2 = H, R3R4 = CH:CHCH:CH]. However, the similar reaction of 3-allyl-2-quinolinones gives pyrano[3,2-c]quinolines and a pyrano[2,3-b]quinoline.

IT 178059-94-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of furo- and pyranoquinolines)

RN 178059-94-4 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(2-propenyl)- (9CI) (CA INDEX NAME)



L28 ANSWER 101 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:282687 CAPLUS

DOCUMENT NUMBER: 125:58285

TITLE: Metalation of methoxy-2(1H)-quinolinones

AUTHOR(S): Moreno, Trinidad; Fernandez, Maria; de la Cuesta, Elena; Avendano, Carmen

CORPORATE SOURCE: Facultad de Farmacia, Universidad Complutense, Madrid, 28040, Spain

SOURCE: Heterocycles (1996), 43(4), 817-828

CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

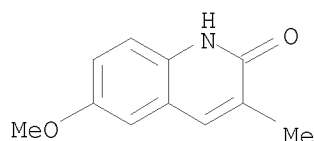
DOCUMENT TYPE: Journal

LANGUAGE: English

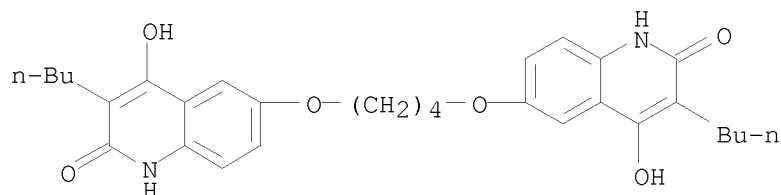
OTHER SOURCE(S): CASREACT 125:58285

AB A methoxy group at the 5- or 6-position of 2(1H)-quinolinones is compatible with the regioselective electrophilic substitution and chain enlargement at the 3-position imposed by the ortho-directed effect of the quinolinone lithium salt. The coordination effect of a methoxy group at the 8-position changes the reaction course, precluding the ortho-directed

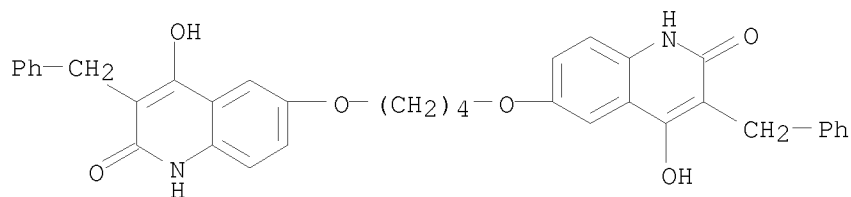
metalation and enhancing the conjugate addition at the 4-position.  
 IT 123990-77-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (regioselective methylation and silylation of methoxyquinolinones via  
 metalation)  
 RN 123990-77-2 CAPLUS  
 CN 2(1H)-Quinolinone, 6-methoxy-3-methyl- (CA INDEX NAME)



L28 ANSWER 102 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:123343 CAPLUS  
 DOCUMENT NUMBER: 124:260801  
 TITLE: Synthesis and some reactions of 3-substituted  
 1,4-bis(4-hydroxy-2-oxo-1,2-dihydroquinolin-6-  
 yloxy)butanes  
 AUTHOR(S): Klasek, Antonin; Kafka, Stanislav; Kappe, Thomas  
 CORPORATE SOURCE: Dep. Eenvironmental Chem. Technol., Technical Univ.  
 Brno, Brno, 762 72, Czech Rep.  
 SOURCE: Collection of Czechoslovak Chemical Communications  
 (1995), 60(12), 2137-46  
 CODEN: CCCCAK; ISSN: 0010-0765  
 PUBLISHER: Institute of Organic Chemistry and Biochemistry,  
 Academy of Sciences of the Czech Republic  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Condensation of 1,4-bis(4-aminophenoxy)butane and its N,N'-dimethyl derivative  
 with substituted di-Et malonates gave 1,4-bis(4-hydroxy-2-oxo-1,2-  
 dihydroquinolin-6-yloxy)butane. From these compds. 1,4-bis(3-halo-2,4-  
 dioxo-1,2,3,4-tetrahydroquinolin-6-yloxy)butanes and 1,4-bis(3-hydroxy-2,4-  
 dioxo-1,2,3,4-tetrahydroquinolin-6-yloxy)butanes were prepared  
 IT 175440-87-6P 175440-88-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and halogenation of)  
 RN 175440-87-6 CAPLUS  
 CN 2(1H)-Quinolinone, 6,6'-[1,4-butanediylbis(oxy)]bis[3-butyl-4-hydroxy-  
 (9CI) (CA INDEX NAME)



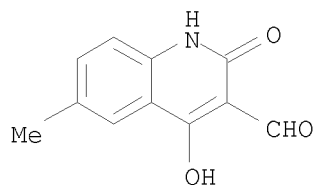
RN 175440-88-7 CAPLUS  
 CN 2(1H)-Quinolinone, 6,6'-[1,4-butanediylbis(oxy)]bis[4-hydroxy-3-  
 (phenylmethyl)- (9CI) (CA INDEX NAME)



L28 ANSWER 103 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:86212 CAPLUS  
 DOCUMENT NUMBER: 124:260986  
 TITLE: Quinolones substituted by different moieties. Part 1. Synthesis of new polynuclear heterocyclic systems as substituents to 4-hydroxy-1-methyl-2(1H)quinolinone  
 AUTHOR(S): Ismail, Mostafa M.; Morsy, Jehan M.; Abass, Mohamed  
 CORPORATE SOURCE: Chem. Dep., Ain Shams Univ., Cairo, Egypt  
 SOURCE: Journal of the Serbian Chemical Society (1996), 61(1), 9-15  
 CODEN: JSCSEN; ISSN: 0352-5139  
 PUBLISHER: Serbian Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 124:260986  
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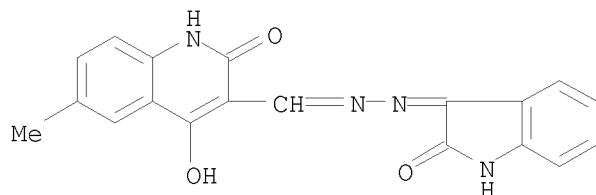
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Some new heterocyclic systems substituted to 2(1H)quinolone at position 3 have been synthesized through the condensation of 2(1H)quinolinone-3-carbaldehydes I (R4 = Me, R5 = H; R4 = H, R5 = Me) with isatin-3-hydrazones II (R1 = R2 = R3 = H; R1 = Cl, R2 = R3 = H; R1 = R3 = H, R2 = Cl; R1 = R2 = H, R3 = Cl) giving the coupled products which were introduced into the Mannich condensation reaction to produce compds. III (Z = O, CH2). Indolotriazinotetrazinylquinoline IV and quinoxalinotriazinotetrazinylquinoline V were also prepared  
 IT 156992-48-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of quinolones substituted by polynuclear heterocyclic moieties)  
 RN 156992-48-2 CAPLUS  
 CN 3-Quinolonecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)

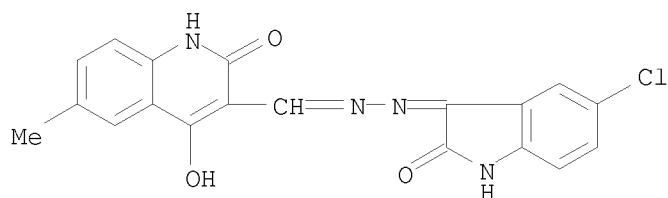


IT 174838-57-4P 174838-58-5P 174838-59-6P  
 174838-60-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of quinolones substituted by polynuclear heterocyclic moieties)

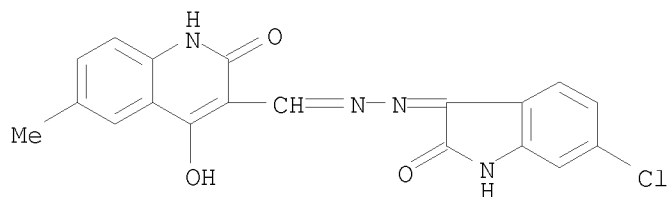
RN 174838-57-4 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo-,  
 3-[(1,2-dihydro-2-oxo-3H-indol-3-ylidene)hydrazone] (9CI) (CA INDEX NAME)



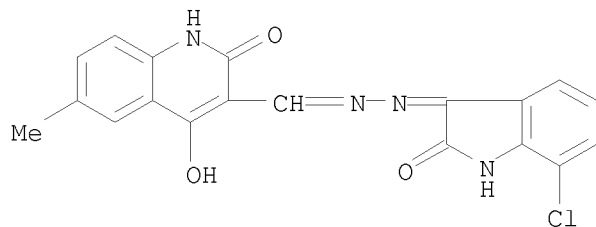
RN 174838-58-5 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo-,  
 3-[(5-chloro-1,2-dihydro-2-oxo-3H-indol-3-ylidene)hydrazone] (9CI) (CA  
 INDEX NAME)



RN 174838-59-6 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo-,  
 3-[(6-chloro-1,2-dihydro-2-oxo-3H-indol-3-ylidene)hydrazone] (9CI) (CA  
 INDEX NAME)



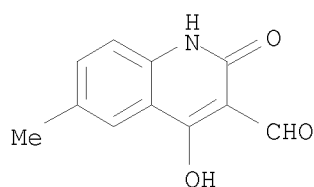
RN 174838-60-9 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo-,  
 3-[(7-chloro-1,2-dihydro-2-oxo-3H-indol-3-ylidene)hydrazone] (9CI) (CA  
 INDEX NAME)



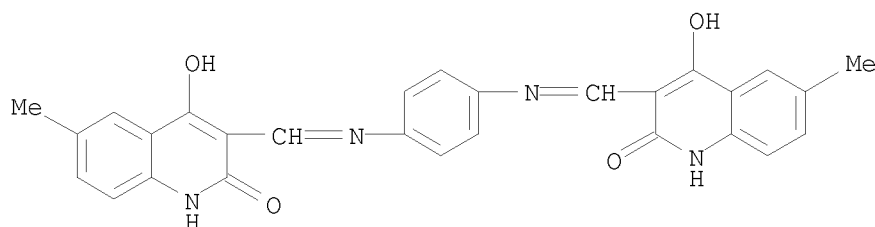
ACCESSION NUMBER: 1996:69472 CAPLUS  
 DOCUMENT NUMBER: 124:218524  
 TITLE: Preparation and properties of metal complexes with new Schiff bases derived from 6-methyl-3-formyl-4-hydroxy-2-(1H)quinolone and o- and p-phenylenediamine. Part III  
 AUTHOR(S): Khalil, Saied M. E.; Emara, Adel A. A.; Abd El-Hameed, Faten S. M.; Taha, Ali  
 CORPORATE SOURCE: Fac. Educ., Ain-Shams Univ., Roxy/Cairo, Egypt  
 SOURCE: Journal of the Chemical Society of Pakistan (1995), 17(3), 170-6  
 CODEN: JCSPDF; ISSN: 0253-5106  
 PUBLISHER: Chemical Society of Pakistan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The preparation of metal complexes of Schiff bases derived from 6-methyl-3-formyl-4-hydroxy-2-(1H)quinolone and o- and p-phenylenediamine are described. The ligands behave either as dibasic bidentate or tetradentate. Mono-, di- and tetra-nuclear complexes were obtained. Different products were obtained from similar reactions of either ligands due to their structural differences. Also, different metals and their counter anions yielded a variety of products. Complexes of Cu<sup>2+</sup>, Ni<sup>2+</sup> and VO<sup>2+</sup> have similar structures for each of the ligands used. However, UO<sup>22+</sup> and Fe<sup>3+</sup> complexes were different, also different from one ligand to the other. The acetate and chloride ions were found to be coordinated to the metals in some products. The products were characterized by their visible and IR spectra and measurements of their magnetic moments.

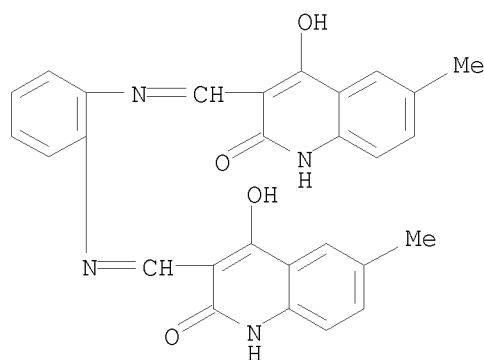
IT 156992-48-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (for preparation of transition metal formylhydroxyquinolone phenylenediamine Schiff base complexes)  
 RN 156992-48-2 CAPLUS  
 CN 3-Quinolonecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



IT 125598-90-5P 174156-32-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (for preparation of transition metal formylhydroxyquinolone phenylenediamine Schiff base complexes)  
 RN 125598-90-5 CAPLUS  
 CN 2(1H)-Quinolone, 3,3'-[1,4-phenylenebis(nitrilomethylidyne)]bis[4-hydroxy-6-methyl- (9CI) (CA INDEX NAME)

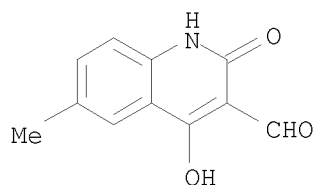


RN 174156-32-2 CAPLUS  
 CN 2(1H)-Quinolinone, 3,3'-[1,2-phenylenebis(nitrilomethylidene)]bis[4-hydroxy-6-methyl- (9CI) (CA INDEX NAME)

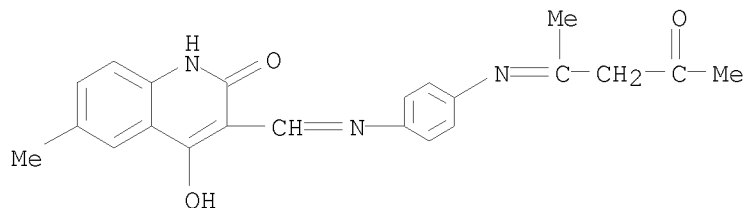


L28 ANSWER 105 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:832660 CAPLUS  
 DOCUMENT NUMBER: 123:274354  
 TITLE: Copper(II), nickel(II), oxovanadium(IV) and dioxouranium(VI) complexes of novel asymmetric tetradentate Schiff base ligands derived from 6-methyl-3-formyl-4-hydroxy-2-(1H)-quinolone. Part V  
 AUTHOR(S): Khalil, Saied M. E.; Mashaly, Mahmoud M.; Emara, Adel A. A.  
 CORPORATE SOURCE: Dep. Chem., Faculty Education, Ain Shams University, Cairo, Egypt  
 SOURCE: Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry (1995), 25(8), 1373-89  
 CODEN: SRIMCN; ISSN: 0094-5714  
 PUBLISHER: Dekker  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The novel, half-unit ligand obtained by the single condensation of 6-methyl-3-formyl-4-hydroxy-2-(1H)-quinolone and p-phenylenediamine, was condensed with either acetylacetone or salicylaldehyde to yield novel, asym. tetradentate Schiff base ligands, H2La and H2Lb, resp. The reactions of the ligands with Cu<sup>2+</sup>, Ni<sup>2+</sup>, VO<sup>2+</sup> and UO<sub>2</sub><sup>2+</sup> salts yielded [L2M2].nH<sub>2</sub>O, except that of the uranyl complex of the ligand H2La which has the formula [La(UO<sub>2</sub>)<sub>2</sub>(OAc)<sub>2</sub>(OH)<sub>2</sub>]. The ligands and metal complexes were characterized by elemental analyses, IR, UV-visible, mass and ESR spectra and magnetic measurements. The Cu<sup>2+</sup> complexes are distorted tetrahedral, the Ni<sup>2+</sup> complexes are octahedral, the VO<sup>2+</sup> complexes are square pyramidal and the UO<sub>2</sub><sup>2+</sup> complexes are pentagonal bipyramidal. The vanadyl and Ni complexes showed antiferromagnetic interaction between adjacent metal cations.

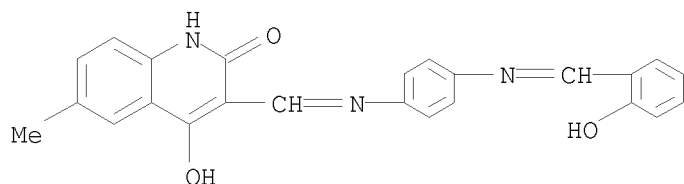
IT 156992-48-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (for preparation of asym. Schiff bases)  
 RN 156992-48-2 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



IT 169306-98-3P 169306-99-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and complexation with transition metals)  
 RN 169306-98-3 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-[[[4-[(1-methyl-3-oxobutylidene)amino]phenyl]imino]methyl]- (CA INDEX NAME)



RN 169306-99-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-3-[[[4-[[[2-hydroxyphenyl)methylene]amino]phenyl]imino]methyl]-6-methyl- (CA INDEX NAME)



L28 ANSWER 106 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:711976 CAPLUS  
 DOCUMENT NUMBER: 123:111861  
 TITLE: Preparation of piperidinylcarbonylcarbostyrils as peripheral vasodilators  
 INVENTOR(S): Fujioka, Takafumi; Teramoto, Shuji; Tanaka, Michinori; Shimizu, Hiroshi; Tabusa, Fujio; Tominaga, Michiaki  
 PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 111 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English



FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9419339	A1	19940901	WO 1994-JP157	19940203
W: AU, CA, CN, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 06239858	A	19940830	JP 1993-26594	19930216
CA 2133207	A1	19940901	CA 1994-2133207	19940203
AU 9459788	A	19940914	AU 1994-59788	19940203
AU 666259	B2	19960201		
EP 636128	A1	19950201	EP 1994-905839	19940203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1102527	A	19950510	CN 1994-190064	19940203
US 5591751	A	19970107	US 1994-318801	19941014
PRIORITY APPLN. INFO.:				
			JP 1993-26594	A 19930216
			JP 1993-76907	A 19930402
			JP 1993-80677	A 19930407
			WO 1994-JP157	W 19940203

OTHER SOURCE(S): MARPAT 123:111861

GI For diagram(s), see printed CA Issue.

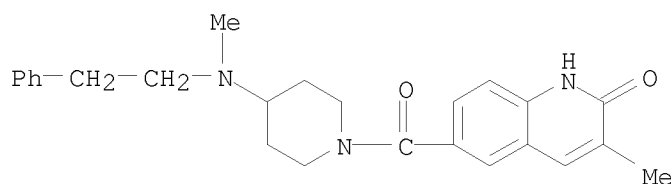
AB Title compds. I (R1A = H, alkyl; R2A, R3A = H, alkyl, (phenylthio)alkyl, (substituted) phenoxyalkyl; R4A = H, alkyl, alkoxy, O2N, (phenylalkyl)amino, etc.) or a salt thereof, are prepared Di-Et cyanophosphate and Et3N were added to 6-carboxy-8-ethylcarbostyril and 4-[methyl(2-phenylethyl)amino]piperidine in DMF to give the title compound II. Representative I showed peripheral vasodilating activity. Pharmaceutical formulations comprising I, are given.

IT 165591-74-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of piperidinylcarbonylcarbostyrils as peripheral vasodilators)

RN 165591-74-2 CAPLUS

CN 4-Piperidinamine, 1-[(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)carbonyl]-N-methyl-N-(2-phenylethyl)- (9CI) (CA INDEX NAME)



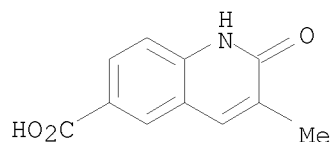
IT 165592-44-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of piperidinylcarbonylcarbostyrils as peripheral vasodilators)

RN 165592-44-9 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2-dihydro-3-methyl-2-oxo- (CA INDEX NAME)



L28 ANSWER 107 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:504917 CAPLUS

DOCUMENT NUMBER: 123:313811

TITLE: Synthesis of some multiazaheterocycles as substituents to quinolone moiety of specific biological activity

AUTHOR(S): Mohamed, E. A.; Ismail, M. M.; Gabr, Y.; Abass, M.

CORPORATE SOURCE: Fac. Education, Ain Shams Univ., Cairo, Egypt

SOURCE: Chemical Papers (1994), 48(4), 285-92

CODEN: CHPAEG; ISSN: 0366-6352

PUBLISHER: Slovak Academy of Sciences, Institute of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

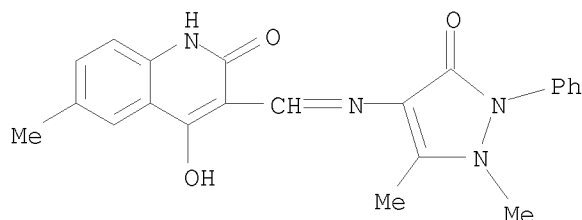
AB New Schiff bases, hydrazones and semicarbazones derived from 1,2-dihydro-4-hydroxy-6-methyl-2-oxoquinoline-3-carbaldehyde, have been synthesized. The semicarbazone was reacted with 2,3-dichloroquinoxaline, chloroacetic acid, and oxalyl chloride to give multiazaheterocycles substituted on the quinolone moiety at position 3. Condensation of the 2-imidazolidinethione derivative with some amines and hydrazines yielded some new heterocyclic systems. Some of these imine derivs. were tested for their bactericidal, fungicidal, and molluscicidal activities. The structure of all new quinolone derivs. have been characterized by chemical reactions and phys. tools.

IT 161152-07-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
(synthesis and biol. activity of (aryliminomethyl)quinolones)

RN 161152-07-4 CAPLUS

CN 2(1H)-Quinolinone, 3-[[ (2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)imino]methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)



IT 161152-26-7P 169970-01-8P 169970-02-9P

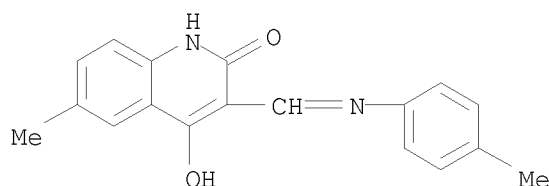
169970-03-0P 169970-04-1P 169970-05-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

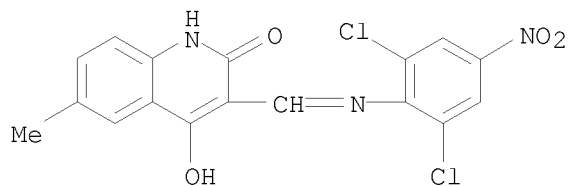
(synthesis and biol. activity of (aryliminomethyl)quinolones)

RN 161152-26-7 CAPLUS

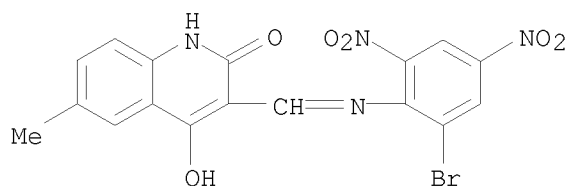
CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-[[ (4-methylphenyl)imino]methyl]- (CA INDEX NAME)



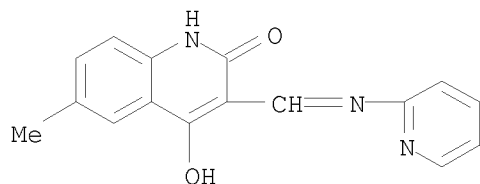
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 CN 2(1H)-Quinolinone, 3-[[ (2,6-dichloro-4-nitrophenyl) imino]methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)



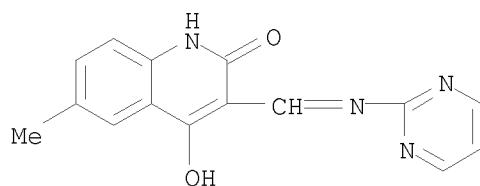
RN 169970-02-9 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[[ (2-bromo-4,6-dinitrophenyl) imino]methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)



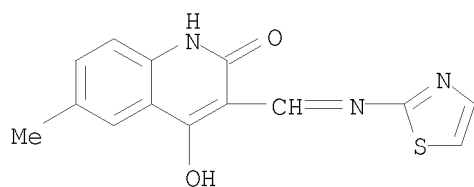
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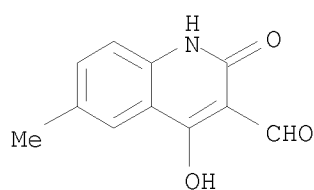
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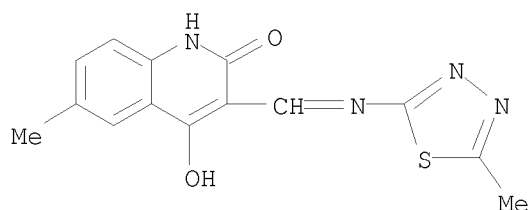
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 CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-[(2-thiazolylimino)methyl]- (CA INDEX NAME)



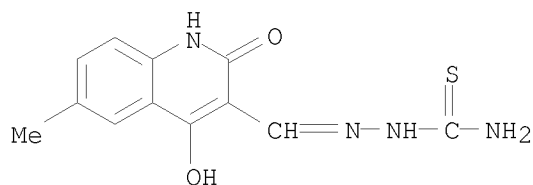
IT 156992-48-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (synthesis and biol. activity of (aryliminomethyl)quinolones)  
 RN 156992-48-2 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA  
 INDEX NAME)



IT 169970-06-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis and biol. activity of (aryliminomethyl)quinolones)  
 RN 169970-06-3 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-[[5-methyl-1,3,4-thiadiazol-2-  
 yl)imino]methyl]- (CA INDEX NAME)

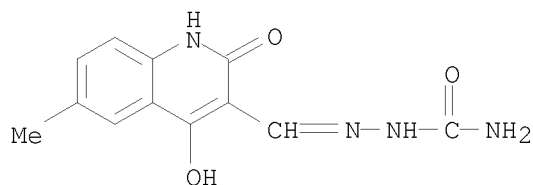


IT 169970-09-6P 169970-10-9P 169970-11-0P  
 169970-12-1P 169970-13-2P 169970-16-5P  
 169970-18-7P 169970-21-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (synthesis of multiazaheterocyclyl-substituted quinolones)  
 RN 169970-09-6 CAPLUS  
 CN Hydrazinecarbothioamide, 2-[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-  
 quinolinyl)methylene]- (CA INDEX NAME)



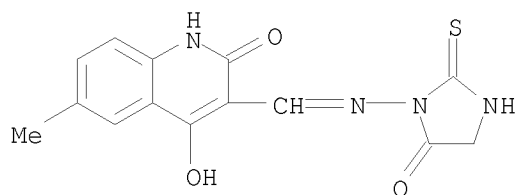
RN 169970-10-9 CAPLUS

CN Hydrazinecarboxamide, 2-[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]- (CA INDEX NAME)



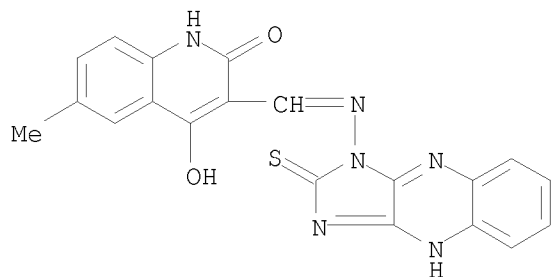
RN 169970-11-0 CAPLUS

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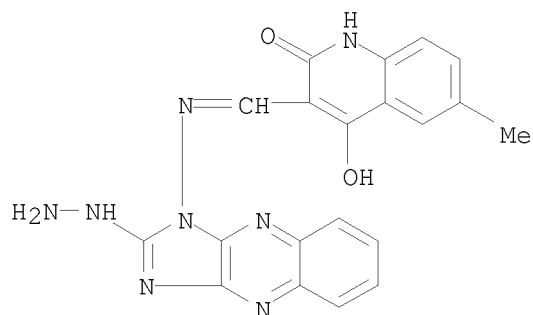
RN 169970-12-1 CAPLUS

CN 2(1H)-Quinolinone, 3-[[ (2,3-dihydro-2-thioxo-1H-imidazo[4,5-b]quinoxalin-1-yl)imino]methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)



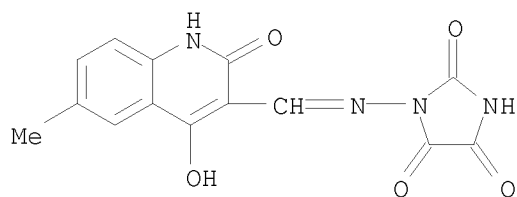
RN 169970-13-2 CAPLUS

CN 2H-Imidazo[4,5-b]quinoxalin-2-one, 1-[[ (1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]-1,3-dihydro-, 2-hydrazone (9CI) (CA INDEX NAME)



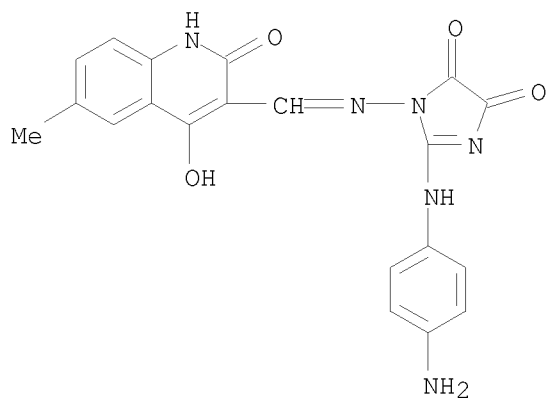
RN 169970-16-5 CAPLUS

CN Imidazolidinetrione, [[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]- (9CI) (CA INDEX NAME)



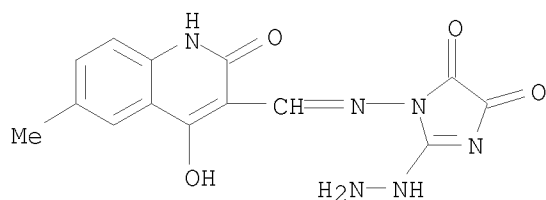
RN 169970-18-7 CAPLUS

CN 1H-Imidazole-4,5-dione, 2-[(4-aminophenyl)amino]-1-[[ (1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]- (CA INDEX NAME)

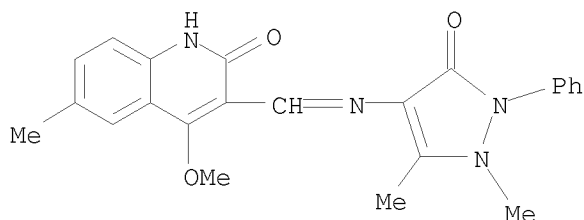


RN 169970-21-2 CAPLUS

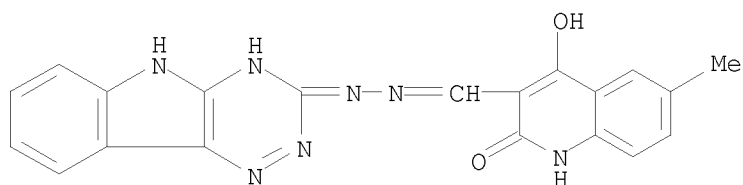
CN Imidazolidinetrione, [[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]-, 2-hydrazone (9CI) (CA INDEX NAME)



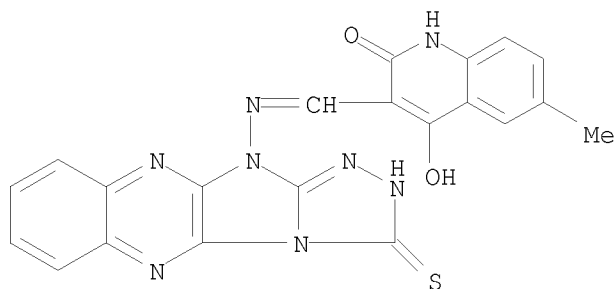
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 169970-24-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis of multiazaheterocyclyl-substituted quinolones)  
 RN 169970-07-4 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[[ (2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)imino]methyl]-4-methoxy-6-methyl- (CA INDEX NAME)



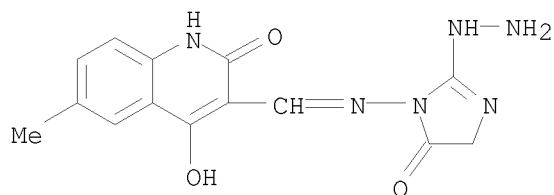
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 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo-,  
 3-(2H-1,2,4-triazino[5,6-b]indol-3-ylhydrazone) (9CI) (CA INDEX NAME)



RN 169970-14-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[[ (2,3-dihydro-3-thioxo-1H-1,2,4-triazolo[4',3':1,2]imidazo[4,5-b]quinoxalin-11-yl)imino]methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)

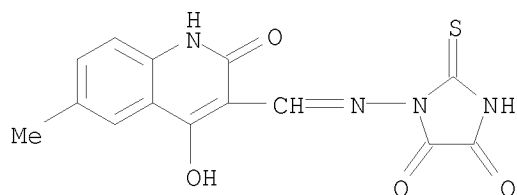


RN 169970-15-4 CAPLUS  
 CN 2,4-Imidazolidinedione, 3-[[ (1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]-, 2-hydrazone (9CI) (CA INDEX NAME)



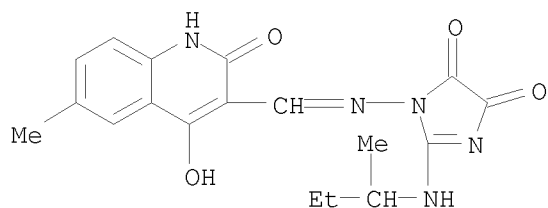
RN 169970-17-6 CAPLUS

CN 4,5-Imidazolidinedione, 1-[[[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]-2-thioxo- (CA INDEX NAME)



RN 169970-19-8 CAPLUS

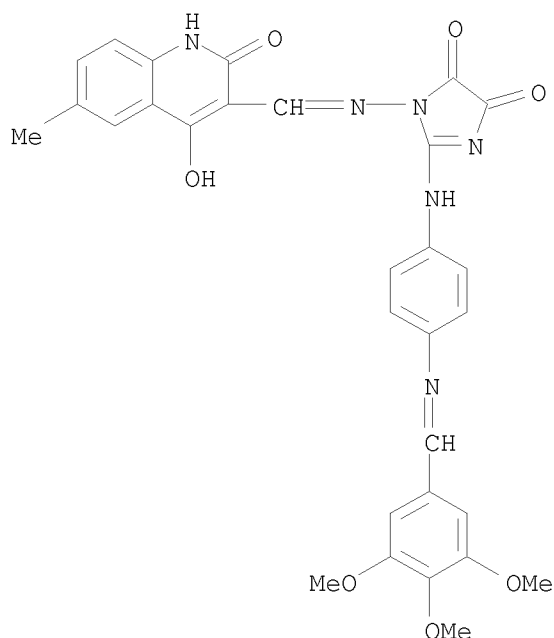
CN 1H-Imidazole-4,5-dione, 1-[[[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]-2-[(1-methylpropyl)amino]- (CA INDEX NAME)



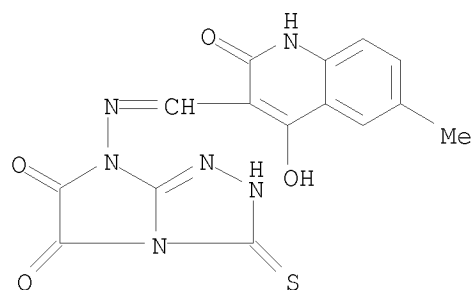
RN 169970-20-1 CAPLUS

CN 1H-Imidazole-4,5-dione, 1-[[[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]-2-[[4-[(3,4,5-trimethoxyphenyl)methylene]amino]phenyl]amino]- (CA INDEX NAME)

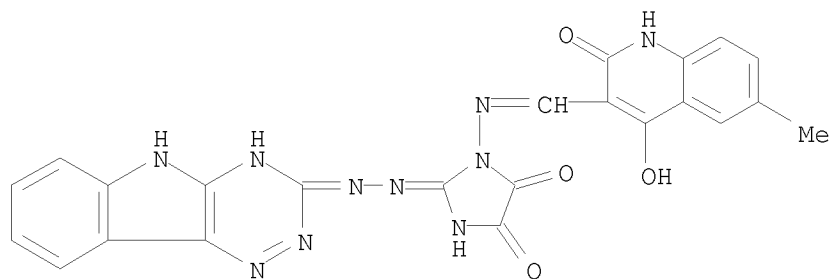




RN 169970-22-3 CAPLUS  
 CN 3H-Imidazo[2,1-c]-1,2,4-triazole-5,6-dione, 7-[[[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]-2,7-dihydro-3-thioxo- (CA INDEX NAME)

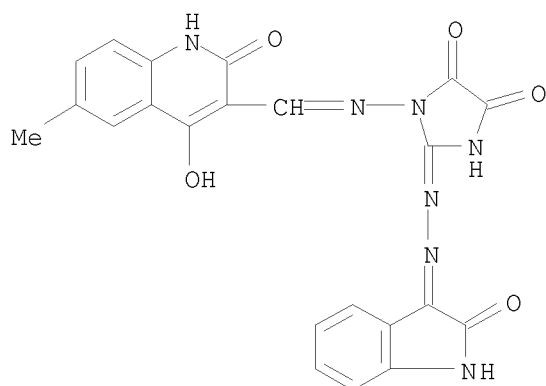


RN 169970-23-4 CAPLUS  
 CN Imidazolidinetrione, [[[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl)methylene]amino]-, 2-(2H-1,2,4-triazino[5,6-b]indol-3-ylhydrazine) (9CI) (CA INDEX NAME)



RN 169970-24-5 CAPLUS

CN Imidazolidinetrione, [[[1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinoliny]methylene]amino]-, 2-[[1,2-dihydro-2-oxo-3H-indol-3-ylidene)hydrazone] (9CI) (CA INDEX NAME)



L28 ANSWER 108 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:347986 CAPLUS

DOCUMENT NUMBER: 122:176971

TITLE: Metal complexes of a Schiff base derived from 6-methyl-3-formyl-4-hydroxy-2-(1H)-quinolone and ethanolamine. Part I

AUTHOR(S): Khalil, Saied M. E.

CORPORATE SOURCE: Dept. Chem., Ain-Shams Univ., Cairo, Egypt

SOURCE: Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry (1995), 25(1), 71-84  
CODEN: SRIMCN; ISSN: 0094-5714

PUBLISHER: Dekker

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The reaction of the terdentate dibasic Schiff base ligand, derived from 6-methyl-3-formyl-4-hydroxy-2-(1H)-quinolone and ethanolamine, with metal salts of Cu, Ni, Mn, Co, Zn, Cd, V, U, Fe, and Th yielded monomeric and dimeric products depending on the metal:ligand ratio, the metal cations used and their counteranions. The ligand is either terdentate and monobasic or dibasic, but in some cases it behaves as a bidentate monobasic ligand. The dimeric products were bridged through either Cl, acetate or sulfate groups, or the phenolic or alc. O of the ligand. Both Cu and Ni chlorides yielded similar complexes while the acetate analogs yielded different products. The complexes were studied by IR and visible spectroscopy, and by measurements of magnetic moments and mol. wts.

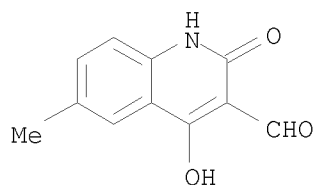
IT 156992-48-2, 3-Formyl-4-hydroxy-6-methyl-2-(1H)-quinolone

RL: RCT (Reactant); RACT (Reactant or reagent)

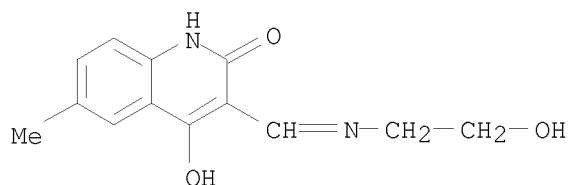
(for preparation of Schiff base with ethanolamine and transition metal Schiff base complexes)

RN 156992-48-2 CAPLUS

CN 3-Quinolonecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)

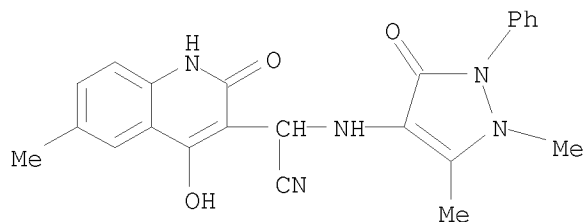


IT 161374-48-7DP, transition metal complexes  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (for preparation of transition metal complexes)  
 RN 161374-48-7 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-3-[[2-hydroxyethylimino]methyl]-6-methyl-  
 (CA INDEX NAME)



L28 ANSWER 109 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:297150 CAPLUS  
 DOCUMENT NUMBER: 122:160601  
 TITLE: Synthesis and biological activity of some  
 3-heterocycl-4-hydroxy-6-methyl-2 (1H)-quinolones  
 AUTHOR(S): Mohamed, E. A.; Ismail, M. M.; Gabr, Y.; Farrag, H. A.  
 CORPORATE SOURCE: Faculty Education, Ain Shams Univ., Cairo, Egypt  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1995),  
 34B(1), 21-6  
 CODEN: IJSBDB; ISSN: 0376-4699  
 PUBLISHER: Publications & Information Directorate, CSIR  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 122:160601  
 AB Schiff bases derived from 4-hydroxy-6-methyl-2(1H)-quinolone, have been  
 synthesized and allowed to undergo addition of HCN, thiosalicylic acid,  
 thioglycolic acid and HBr. The bromo function of the HBr adduct is  
 susceptible to substitution by different reagents containing nitrogen and/or  
 sulfur, the products of which are cyclized to different heterocyclic  
 systems, viz. 1,3-benzothiazinone, 1,3-thiazolidinone,  
 perhydro-1,2,4-triazine, s-triazolidine, imidazoline and  
 triazolidinotriazolidine, as substituents at position-3 of  
 4-hydroxy-6-methyl-2(1H)-quinolone. Some of the newly synthesized compds.  
 are found to be biol. active towards some gram neg. and gram pos. bacteria  
 as well as against yeast.  
 IT 161152-08-5P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
 study); PREP (Preparation)  
 (preparation of)  
 RN 161152-08-5 CAPLUS  
 CN 3-Quinolineacetonitrile,  $\alpha$ -[(2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-

1H-pyrazol-4-yl)amino]-1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)

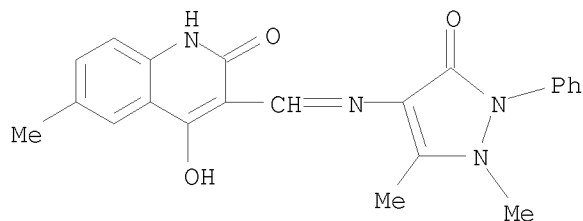


IT 161152-07-4P 161152-13-2P 161152-18-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (synthesis and biol. activity of some heterocyclyl(hydroxy)methylquinolones)

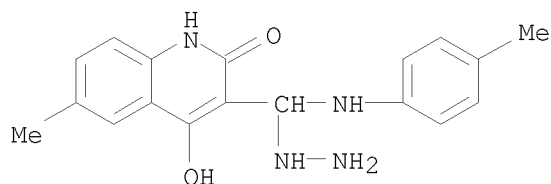
RN 161152-07-4 CAPLUS

CN 2(1H)-Quinolinone, 3-[[[(2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)imino]methyl]-4-hydroxy-6-methyl- (CA INDEX NAME)



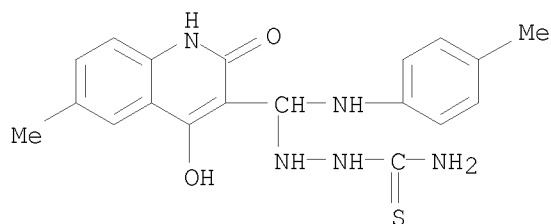
RN 161152-13-2 CAPLUS

CN 2(1H)-Quinolinone, 3-[hydrazino[(4-methylphenyl)amino]methyl]-4-hydroxy-6-methyl- (9CI) (CA INDEX NAME)

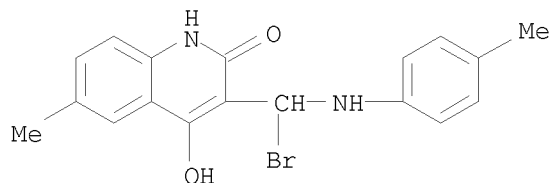


RN 161152-18-7 CAPLUS

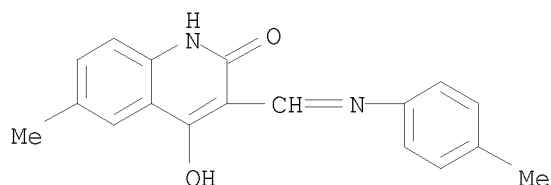
CN Hydrazinecarbothioamide, 2-[(1,2-dihydro-4-hydroxy-6-methyl-2-oxo-3-quinolinyl) [(4-methylphenyl)amino]methyl]- (CA INDEX NAME)



IT 161152-11-0P 161152-26-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (synthesis and biol. activity of some heterocyclyl(hydroxy)methylquinol  
 ones)  
 RN 161152-11-0 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[bromo[(4-methylphenyl)amino]methyl]-4-hydroxy-6-  
 methyl- (CA INDEX NAME)



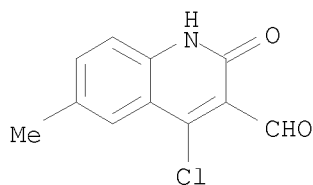
RN 161152-26-7 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-[[4-methylphenyl]imino]methyl]-  
 (CA INDEX NAME)



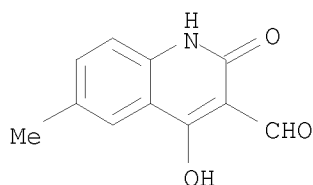
L28 ANSWER 110 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:269682 CAPLUS  
 DOCUMENT NUMBER: 122:160611  
 TITLE: Some more new quinolones of expected biological  
 activity  
 AUTHOR(S): Mohamded, E. A.; Ismail, M. M.; Gabr, Y.; Abass, M.  
 CORPORATE SOURCE: Dep. Chem., Ain-Shams Univ., Cairo, Egypt  
 SOURCE: Journal of the Serbian Chemical Society (1994),  
 59(10), 715-26  
 CODEN: JSCSEN; ISSN: 0352-5139  
 PUBLISHER: Serbian Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Quinolone derivs. were prepared from 4-hydroxy-6-methyl-2(1H)quinolone.  
 Among these prepared quinolones are the nitro, nitroso and the azo derivs.,  
 whose reduction gives 3-amino-2-quinolone, an amino compound that can be  
 cyclized to oxazoloquinolone, which may have medicinal application (no

data). Some sulfonamides, bissulfide and sulfenium salts, derived from 4-hydroxy-6-methyl-2(1H)quinolone (having expected biol. activities) were prepared. The bromination and chlorination of 4-hydroxy-6-methyl-2(1H)quinolone were studied under different conditions. Some heterocycles (pyran and pyrazole) fused to quinolone having expected pharmaceutical importance, were synthesized.

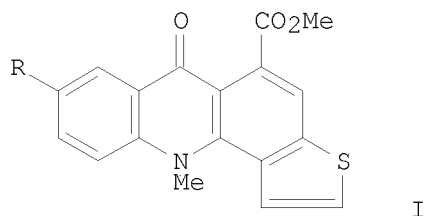
IT 156992-52-8P, 3-Quinolinecarboxaldehyde, 4-chloro-1,2-dihydro-6-methyl-2-oxo  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of)  
 RN 156992-52-8 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 4-chloro-1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



IT 156992-48-2P, 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of (hydroxy)methyl-2(1H)quinolone derivs.)  
 RN 156992-48-2 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



L28 ANSWER 111 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:132025 CAPLUS  
 DOCUMENT NUMBER: 122:55918  
 ORIGINAL REFERENCE NO.: 122:10838h,10839a  
 TITLE: Synthesis of 5-methoxycarbonyl-11-methylthieno[2,3-c]acridan-6(11H)-ones  
 AUTHOR(S): Suresh, J. R.; Jayabalan, L.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046, India  
 SOURCE: Sulfur Letters (1993), 17(1), 7-14  
 CODEN: SULED2; ISSN: 0278-6117  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

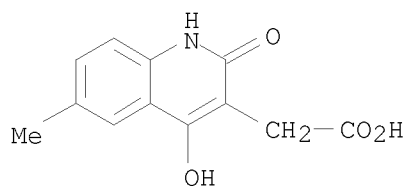


AB The title compds. I (R = H, Me, Br) have been synthesized photochem. from 1-methyl-2-chloro-3-(1-methoxycarbonyl-2-thien-2-ylethenyl)quinolin-4(1H)-ones. The precursors are obtained from 4-hydroxy-2-quinolinone-3-acetic acids.

IT 157192-23-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (synthesis of thienoacridanone derivs.)

RN 157192-23-9 CAPLUS

CN 3-Quinolineacetic acid, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



L28 ANSWER 112 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:655694 CAPLUS

DOCUMENT NUMBER: 121:255694

ORIGINAL REFERENCE NO.: 121:46679a, 46682a

TITLE: Synthesis and utilization of 3-(2'-hydroxyethyl)quinolin-2(1H)-ones. Part-II

AUTHOR(S): Rajendran, S. P.; Shanmugam, P.

CORPORATE SOURCE: Dept. Chem., Bharathiar Univ., Coimbatore, 641 046, India

SOURCE: Journal of the Indian Chemical Society (1993), 70(10), 815-18  
 CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

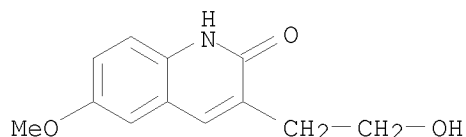
LANGUAGE: English

AB Several 3-(2'-hydroxyethyl)quinolin-2(1H)-ones were prepared by the photolysis of N-aryl-4,5-dihydrofuran-3-carboxamides. These compds. were converted to 2,3-dihydrofuro[2,3-b]quinolines.

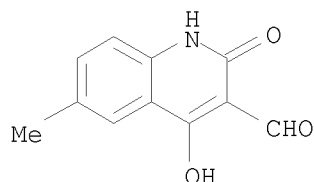
IT 62480-48-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and reactions of (hydroxyethyl)quinolinones)

RN 62480-48-2 CAPLUS

CN 2(1H)-Quinolinone, 3-(2-hydroxyethyl)-6-methoxy- (CA INDEX NAME)



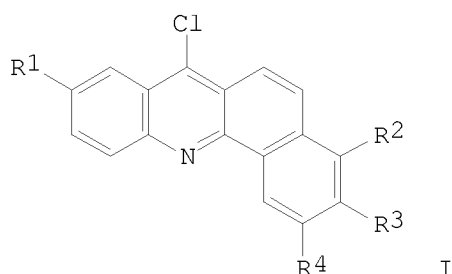
L28 ANSWER 113 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:644201 CAPLUS  
 DOCUMENT NUMBER: 121:244201  
 ORIGINAL REFERENCE NO.: 121:44293a, 44296a  
 TITLE: Metal complexes of Schiff base ligands derived from 4-hydroxy-2-(1H)quinolone and ethylenediamine or 1,2-propylenediamine: Part II  
 AUTHOR(S): Khalil, Saied M. E.  
 CORPORATE SOURCE: Faculty of Education, Ain-Shams University, Cairo, Egypt  
 SOURCE: Indian Journal of Chemistry, Section A: Inorganic, Bio-inorganic, Physical, Theoretical & Analytical Chemistry (1994), 33A(9), 830-6  
 CODEN: ICACEC; ISSN: 0376-4710  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB New Schiff base ligands derived from 3-formyl-4-hydroxy-6-methyl-2-(1H)quinolone and ethylenediamine or 1,2-propylenediamine were prepared and reacted with Ni, Cu, uranyl, vanadyl, and Fe salts to get mononuclear and dinuclear complexes. The ligands behave either as tetradentate dibasic or as bidentate mono- or di-basic ligands. A variety of structures are indicated for the products by their visible and IR spectra, and magnetic measurements. Different products are obtained in similar reactions of the two ligands with the same metal salts which is attributed to the effect of the extra Me group in the latter ligand. Also, different complexes are obtained for the same ligand and the same metal salt using different solvent media. Besides, the variation of the counteranion of the metal salt also leads to different products.  
 IT 156992-48-2, 3-Formyl-4-hydroxy-6-methyl-2-(1H)quinolone  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (for preparation of Schiff bases with diamines)  
 RN 156992-48-2 CAPLUS  
 CN 3-Quinolonecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



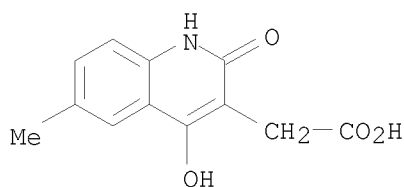
L28 ANSWER 114 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:533931 CAPLUS  
 DOCUMENT NUMBER: 121:133931  
 ORIGINAL REFERENCE NO.: 121:24209a, 24212a  
 TITLE: A photochemical synthesis of benzo[c]acridines  
 AUTHOR(S): Suresh, J. R.; Jayabalan, L.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046,



SOURCE: India  
 Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1994),  
 33B(1), 79-84  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 121:133931  
 GI



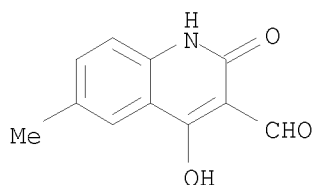
AB A photochem. preparation of several derivs. of benzo[c]acridines I (R1 = H, Me, Br; R2 = H, Cl, OMe; R3, R4 = H, OMe) using substituted 3-styryl-4-quinolinones as precursors is described. The precursors are obtained by condensation of 4-hydroxy-2-quinolinone-3-acetic acids with benzaldehydes.  
 IT 157192-23-9P, 1,2-Dihydro-4-hydroxy-6-methyl-2-oxo-3-Quinolineacetic acid  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as intermediate for benzo[c]acridine)  
 RN 157192-23-9 CAPLUS  
 CN 3-Quinolineacetic acid, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



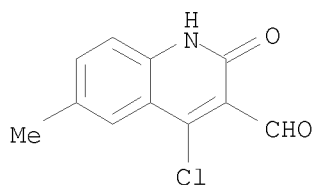
L28 ANSWER 115 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:533921 CAPLUS  
 DOCUMENT NUMBER: 121:133921  
 ORIGINAL REFERENCE NO.: 121:24209a,24212a  
 TITLE: Synthesis of substituted quinolones  
 AUTHOR(S): Mohamed, E.A.; Ismail, M.M.; Gabr, Y.; Abass, M.  
 CORPORATE SOURCE: Fac. Educ., Ain-Shams Univ., Cairo, Egypt  
 SOURCE: Indian Journal of Heterocyclic Chemistry (1993), 3(2), 69-80  
 CODEN: IJCHEI; ISSN: 0971-1627  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB 4-Hydroxy-6-methyl-2(1H)quinolone (1) has been used to prepare a number of quinolones. Thus, 1 has been nitrated, nitrosated and coupled with

diazotized anilines to yield products which were reduced to give  
3-amino-4-hydroxy-6-methyl-2(1H)quinolone.

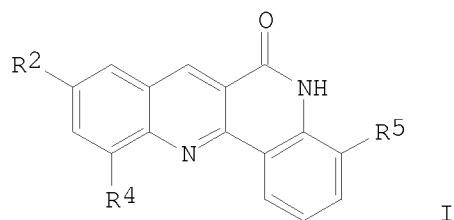
IT 156992-48-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and oxidation of)  
RN 156992-48-2 CAPLUS  
CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-4-hydroxy-6-methyl-2-oxo- (CA  
INDEX NAME)



IT 156992-52-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction with hydrazine)  
RN 156992-52-8 CAPLUS  
CN 3-Quinolinecarboxaldehyde, 4-chloro-1,2-dihydro-6-methyl-2-oxo- (CA INDEX  
NAME)



L28 ANSWER 116 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1994:244979 CAPLUS  
DOCUMENT NUMBER: 120:244979  
ORIGINAL REFERENCE NO.: 120:43429a, 43432a  
TITLE: Synthesis of dibenzo[b,h][1,6]naphthyridin-6(5H)-ones  
AUTHOR(S): Vijayalakshmi, S.; Rajendran, S. P.  
CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046,  
Ire.  
SOURCE: Indian Journal of Chemistry, Section B: Organic  
Chemistry Including Medicinal Chemistry (1994),  
33B(2), 159-62  
CODEN: IJSBDB; ISSN: 0376-4699  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
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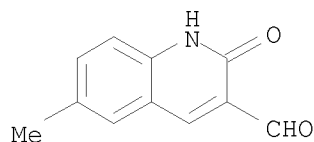


AB Substituted dibenzo[b,h][1,6]naphthyridin-6(5H)-ones I (R2, R4 = H, Me; R5 = H, Cl, MeO) were prepared by treating various 2-oxoquinoline-3-carboxanilides with polyphosphoric acid. The precursors were readily obtained by the condensation of 2-quinoline-3-carboxylic acids with amines.

IT 101382-53-0 123990-78-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant dibenzo[b,h][1,6]naphthyridinone)

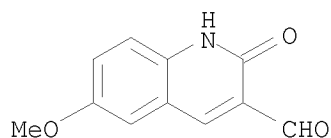
RN 101382-53-0 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



RN 123990-78-3 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



L28 ANSWER 117 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:106966 CAPLUS

DOCUMENT NUMBER: 120:106966

ORIGINAL REFERENCE NO.: 120:18877a,18880a

TITLE: Styrylbenzodiazinones. 2. Chromo- and fluoroionophores derived from monoaza-15-crown-5. Synthesis and structure

AUTHOR(S): Cazaux, Louis; Faher, Mourad; Picard, Claude; Tisnes, Pierre

CORPORATE SOURCE: Cent. Natl. de la Teacher. Sci., Univ. Paul Sabatier, Toulouse, 31062, Fr.

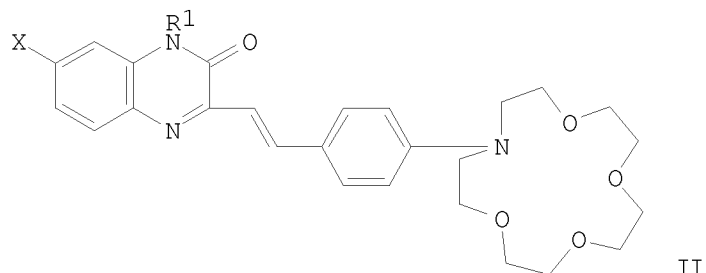
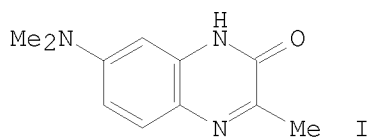
SOURCE: Canadian Journal of Chemistry (1993), 71(8), 1236-46  
 CODEN: CJCHAG; ISSN: 0008-4042

DOCUMENT TYPE: Journal

LANGUAGE: French

OTHER SOURCE(S): CASREACT 120:106966

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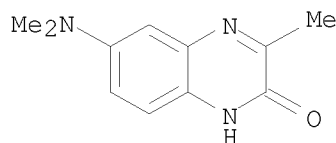
AB 1,4-Benzodiazin-2-one I and two chromo- and fluoroionophores (II; X = H, R1 = Me; X = Me2N, R1 = H) were prepared. A structural study of these compds. by <sup>1</sup>H and <sup>13</sup>C NMR, UV spectrophotometry, and mol. modeling was carried out. Unlike styrylbenzoxazinones, styrylbenzodiazinone derivs. showed a Z/E isomerization in acetonitrile solution. The isomerization was photoinduced, was catalyzed by metal ions, and was a reversible process. An efficient alkylation reaction of the lactam function of benzodiazinones was described.

IT 152580-63-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, spectra and methylation of)

RN 152580-63-7 CAPLUS

CN 2(1H)-Quinoxalinone, 6-(dimethylamino)-3-methyl- (CA INDEX NAME)



L28 ANSWER 118 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:671044 CAPLUS

DOCUMENT NUMBER: 119:271044

ORIGINAL REFERENCE NO.: 119:48501a, 48504a

TITLE: Synthesis of 4-cyanofuro[2,3-b]quinolines

AUTHOR(S): Rajamanickam, P.; Shanmugam, P.

CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046, India

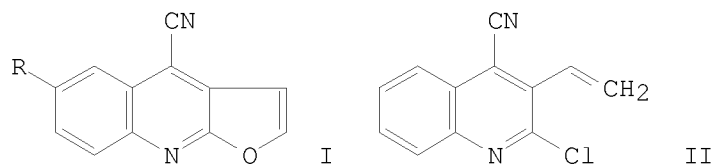
SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences  
(1993), 48(4), 517-20  
CODEN: ZNBSEN; ISSN: 0932-0776

DOCUMENT TYPE: Journal

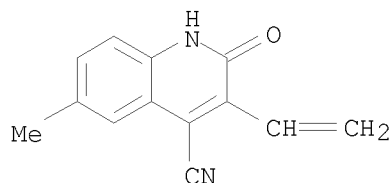
LANGUAGE: English

OTHER SOURCE(S): CASREACT 119:271044

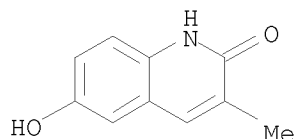
GI



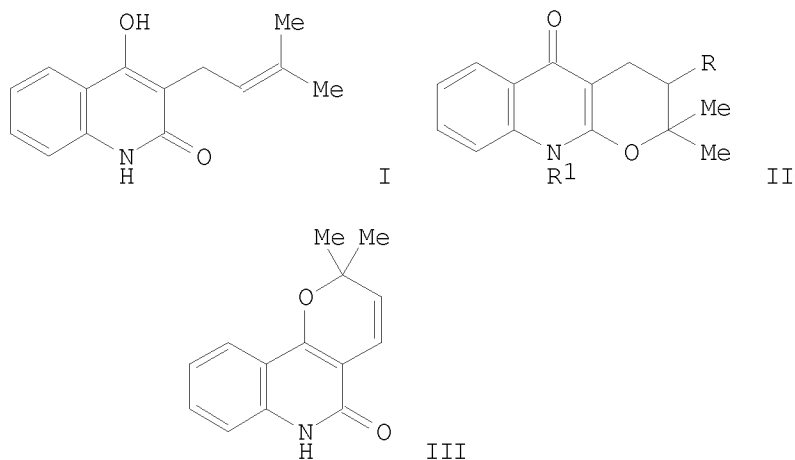
AB 4-Cyanofuro[2,3-b]quinolines I (R= H, Me, Cl, Br) were prepared by  
bromination-cyclization of the 2-chloro-4-cyano-3-vinylquinolines II.  
IT 151091-24-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and bromination-cyclization of)  
RN 151091-24-6 CAPLUS  
CN 4-Quinolinecarbonitrile, 3-ethenyl-1,2-dihydro-6-methyl-2-oxo- (CA INDEX  
NAME)



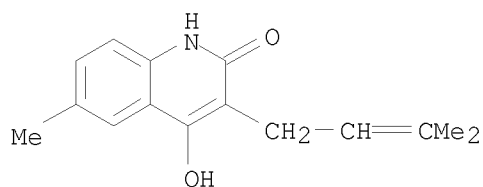
L28 ANSWER 119 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1993:424359 CAPLUS  
DOCUMENT NUMBER: 119:24359  
ORIGINAL REFERENCE NO.: 119:4441a,4444a  
TITLE: Microbial metabolism of quinoline and related  
compounds. XVII. Degradation of 3-methylquinoline by  
Comamonas testosteroni 63  
AUTHOR(S): Schach, Susanne; Schwarz, Gerhild; Fetzner, Susanne;  
Lingens, Franz  
CORPORATE SOURCE: Inst. Mikrobiol., Univ. Hohenheim, Stuttgart,  
W-7000/70, Germany  
SOURCE: Biological Chemistry Hoppe-Seyler (1993), 374(3),  
175-81  
CODEN: BCHSEI; ISSN: 0177-3593  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A bacterial strain which utilizes 3-methylquinoline as sole source of  
carbon, nitrogen and energy was isolated from activated sludge. On the  
basis of its morphol. and physiol. characteristics, this isolate was  
classified as C. testosteroni. Four metabolites of 3-methylquinoline  
degradation were isolated from the culture supernatant and identified as  
3-methyl-2-oxo-1,2-dihydroquinoline, 6-hydroxy-3-methyl-2-  
oxodihydroquinoline, 5,6-dihydroxy-3-methyl-2-oxo-1,2-dihydroquinoline and  
2,5,6-trihydroxy-3-methylpyridine. Based on these results, a degradation  
pathway for 3-methylquinoline is proposed.  
IT 148337-03-5  
RL: FORM (Formation, nonpreparative)  
(formation of, from methylquinoline by Comamonas testosteroni)  
RN 148337-03-5 CAPLUS  
CN 2(1H)-Quinolinone, 6-hydroxy-3-methyl- (CA INDEX NAME)



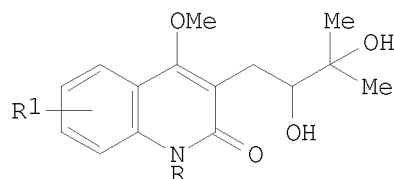
L28 ANSWER 120 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:634305 CAPLUS  
 DOCUMENT NUMBER: 117:234305  
 ORIGINAL REFERENCE NO.: 117:40539a,40542a  
 TITLE: Quinoline alkaloids. Synthesis of khaplofoline, ribalinine, and flindersine  
 AUTHOR(S): Subramanian, M.; Mohan, P. S.; Shanmugam, P.; Prasad, K. J. Rajendra  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046, India  
 SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences (1992), 47(7), 1016-20  
 CODEN: ZNBSEN; ISSN: 0932-0776  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 117:234305  
 GI



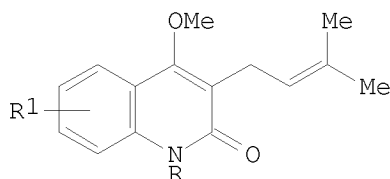
AB Reaction of 4-hydroxy-3-prenylquinolin-2(1 H)-one (I) with iodine and silver acetate gave iodopyranoquinoline II (R = iodo, R1 = H), which was then converted into the alkaloids khaplofoline (II, R = R1 = H), and ribalinine (II, R = OH; R1 = Me). Reaction of I with iodine and mercuric oxide afforded a mixture of II (R = iodo, R1 = H) and its angular isomer; the conversion of the latter into flindersine (III) is described.  
 IT 99822-04-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and intramol. cyclization of)  
 RN 99822-04-5 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



L28 ANSWER 121 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:41269 CAPLUS  
 DOCUMENT NUMBER: 116:41269  
 ORIGINAL REFERENCE NO.: 116:7077a,7080a  
 TITLE: Synthesis of (±)-edulinine analogs  
 AUTHOR(S): Qian, L. G.; Gu, K. J.; Ji, R. Y.  
 CORPORATE SOURCE: Shanghai Inst. Mater. Med., Acad. Sin., Shanghai, 200031, Peop. Rep. China  
 SOURCE: Yaoxue Xuebao (1991), 26(8), 572-7  
 CODEN: YHHPAL; ISSN: 0513-4870  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 GI

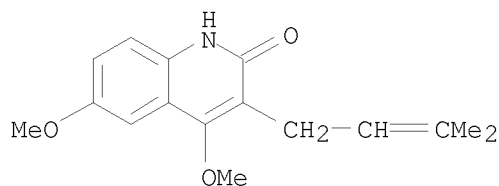


I



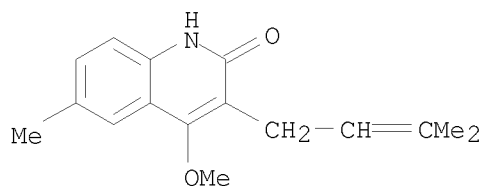
II

AB Title compds. I (R = H, Me; R1 = H, Br, Cl, F, Me, MeO) were prepared in 90-98% yield by refluxing alkenes II with 0.7% aqueous OsO4, trimethylamine N-oxide dihydrate, and pyridine in THF for 7-9 h. I showed anticonvulsant activity.  
 IT 123348-67-4P 138193-20-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and oxidation of)  
 RN 123348-67-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4,6-dimethoxy-3-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)

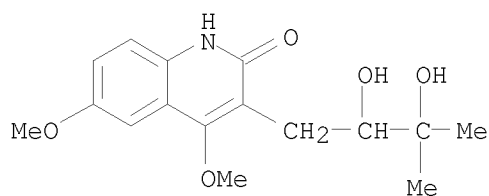


RN 138193-20-1 CAPLUS  
 CN 2(1H)-Quinolinone, 4-methoxy-6-methyl-3-(3-methyl-2-butenyl)- (9CI) (CA

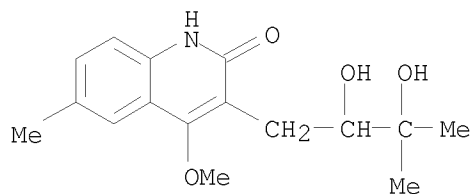
INDEX NAME)



IT 138193-30-3P 138193-31-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 138193-30-3 CAPLUS  
CN 2(1H)-Quinolinone, 3-(2,3-dihydroxy-3-methylbutyl)-4,6-dimethoxy- (CA  
INDEX NAME)



RN 138193-31-4 CAPLUS  
CN 2(1H)-Quinolinone, 3-(2,3-dihydroxy-3-methylbutyl)-4-methoxy-6-methyl-  
(CA INDEX NAME)

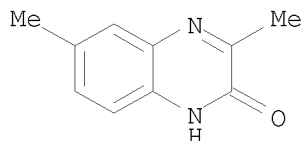


L28 ANSWER 122 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1992:20513 CAPLUS  
DOCUMENT NUMBER: 116:20513  
ORIGINAL REFERENCE NO.: 116:3615a,3618a  
TITLE: HPTLC for monitoring kinetics of the synthesis of  
quinoxaline derivatives  
AUTHOR(S): Fernandez, Beatriz M.; Ines Abasolo, Maria  
CORPORATE SOURCE: Fac. Pharm. Biochem., Univ. Buenos Aires, Buenos  
Aires, Argent.  
SOURCE: Journal of Planar Chromatography--Modern TLC (1990),  
3(1-2), 20-3  
CODEN: JPCTE5; ISSN: 0933-4173  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 116:20513  
AB HPTLC is a useful technique to monitor kinetics of an organic reaction when  
other methods, such as directed UV spectrophotometry or HPLC, fail or when  
adequate software is not available. The synthesis of 6- and 7-substituted

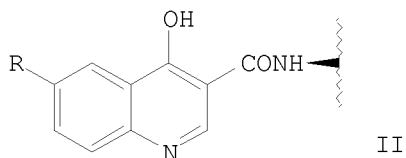
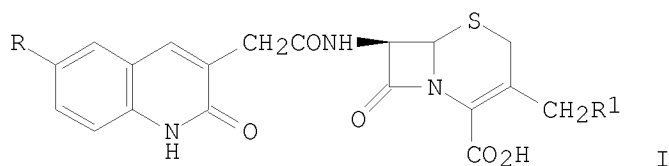


3-methylquinoxalin-2(1H)-ones was followed by HPTLC. This technique allowed us to sep. and identify open intermediates and final products of this annulation reaction, and to maintain all the equilibrium at steady state. HPTLC expts. assisted us to efficiently calculate rate consts. of the reaction, and to propose its possible mechanism, which we previously reported.

IT 28082-84-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 28082-84-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,6-dimethyl- (CA INDEX NAME)



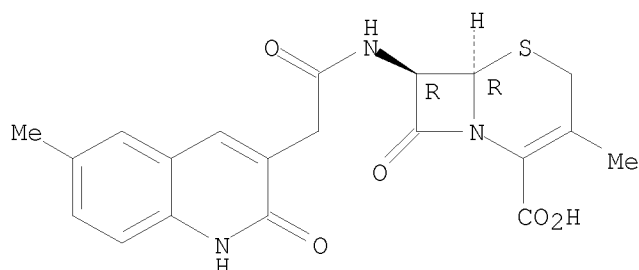
L28 ANSWER 123 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1991:631920 CAPLUS  
 Correction of: 1991:61746  
 DOCUMENT NUMBER: 115:231920  
 Correction of: 114:61746  
 ORIGINAL REFERENCE NO.: 115:39513a, 39516a  
 TITLE: Proton NMR spectra of 7 $\beta$ -(6-substituted-2-quinolone-3-acetamido)- and 7 $\beta$ -(6-substituted-4-hydroxyquinoline-3-formamido)-cephalosporins  
 AUTHOR(S): Chen, Qingping; Duan, Tinghan; Zhou, Huishu  
 CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, Peop. Rep. China  
 SOURCE: Zhongguo Kangshengsu Zazhi (1990), 15(1), 20-6  
 CODEN: ZKZAEY; ISSN: 1001-8689  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB 1H-NMR spectra are reported for cephalosporins I (R = H, Cl, Me, OMe; R1 = H, OAc, 1-methyl-5-tetrazolylthio, 5-methyl-1,3,4-thiadiazol-2-ylthio) and II (R = NO2, R1 = H; R = Cl, R1 = OAc; R = Me, R1 = 1-methyl-5-tetrazolylthio; R = OMe, R1 = 5-methyl-1,3,4-thiadiazol-2-ylthio).

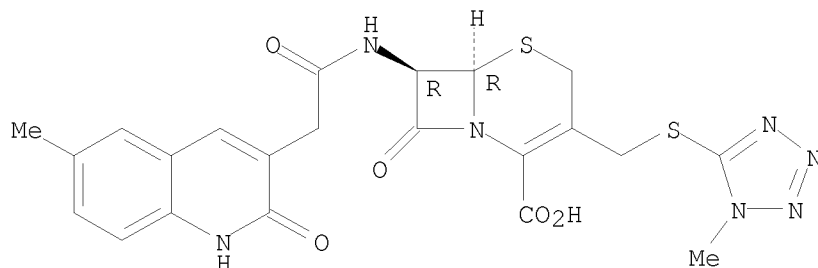
IT 121087-47-6 121087-48-7 121087-49-8  
 121087-50-1 121087-51-2 121087-52-3  
 121087-53-4 121099-48-7  
 RL: PRP (Properties)  
 (NMR of)  
 RN 121087-47-6 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
 , (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



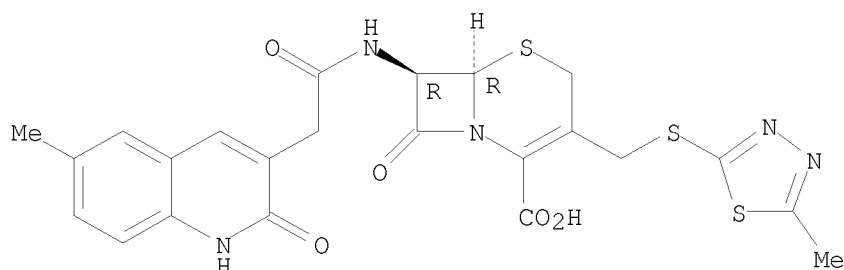
RN 121087-48-7 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-  
 1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



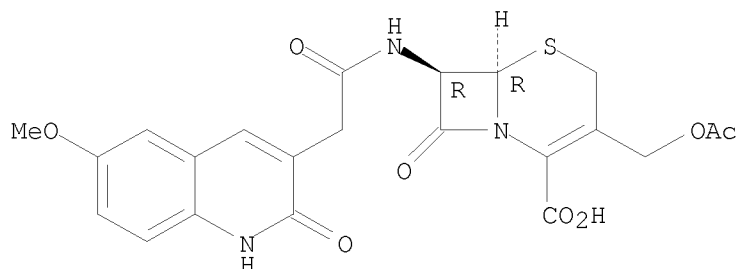
RN 121087-49-8 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-  
 1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.



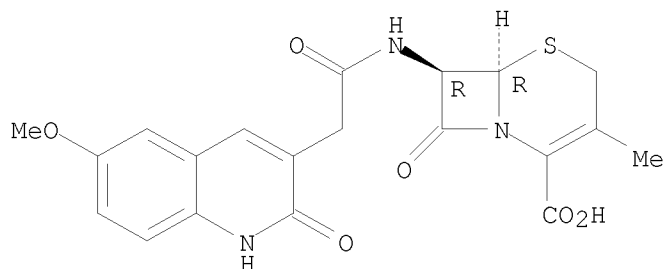
RN 121087-50-1 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



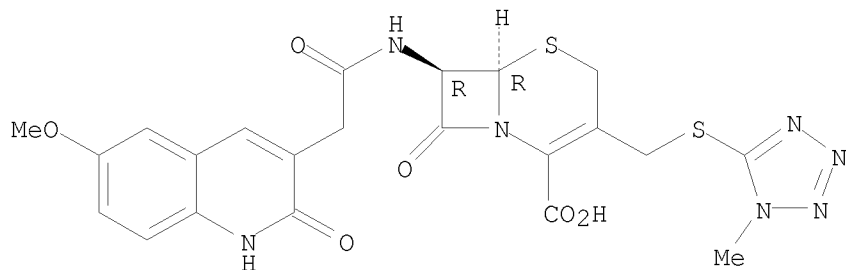
RN 121087-51-2 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 121087-52-3 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

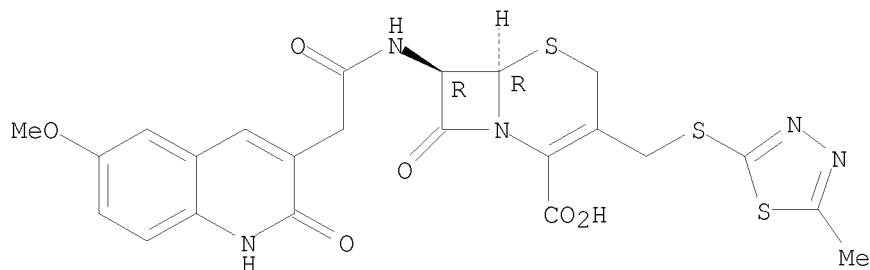
Absolute stereochemistry.



RN 121087-53-4 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

NAME)

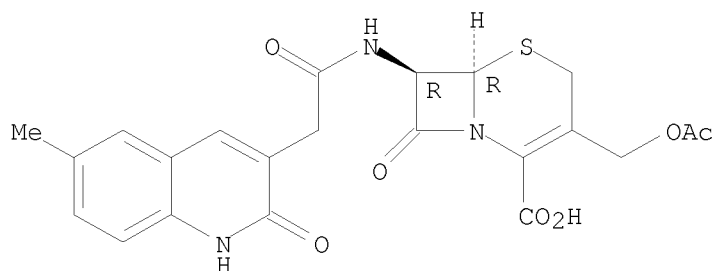
Absolute stereochemistry.



RN 121099-48-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (1,2-dihydro-6-methyl-2-oxo-3-  
quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L28 ANSWER 124 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:589578 CAPLUS

Correction of: 1990:83945

DOCUMENT NUMBER: 115:189578

Correction of: 112:83945

ORIGINAL REFERENCE NO.: 115:32273a,32276a

TITLE: Preparative separation of cephalosporins by  
centrifugal TLC

AUTHOR(S): Chen, Qingping; Zhou, Jiacheng; Duan, Tinghan; Zhou,  
Huishu

CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, Peop.  
Rep. China

SOURCE: Zhongguo Kangshengsu Zazhi (1989), 14(3), 161-7  
CODEN: ZKZAEY; ISSN: 1001-8689

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Synthetic cephalosporin products were isolated by centrifugal TLC. This  
separation technique is satisfactorily applied to the purification of 2 series  
of  
cephalosporins. The operating conditions including preparation and reuse of  
coating layer, selection of the solvent, limit of separation quantity,  
separation  
time, etc., were studied. Centrifugal TLC is a simple and very rapid  
technique for the preparative separation or purification of cephalosporins and  
has  
the advantage of lower cost, less time and better availability. This

method is much more suitable for the separation and purification of unstable substances like cephalosporins.

IT 121087-47-6 121087-49-8 121087-50-1  
121087-51-2 121087-52-3 121087-53-4  
121099-48-7 125113-08-8

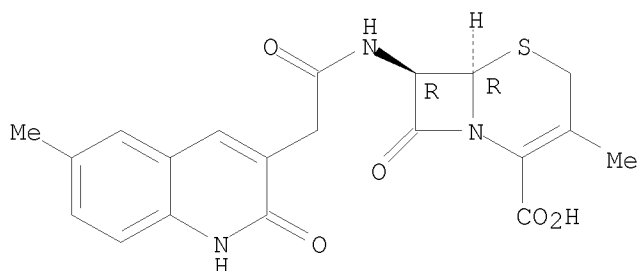
RL: PROC (Process)

(separation of, preparative, by centrifugal TLC)

RN 121087-47-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
, (6R-trans)- (9CI) (CA INDEX NAME)

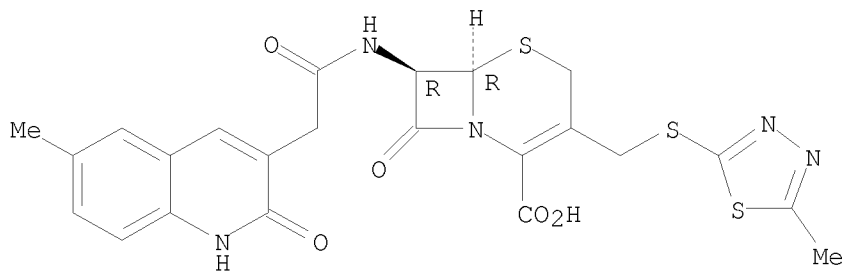
Absolute stereochemistry.



RN 121087-49-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-  
1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
NAME)

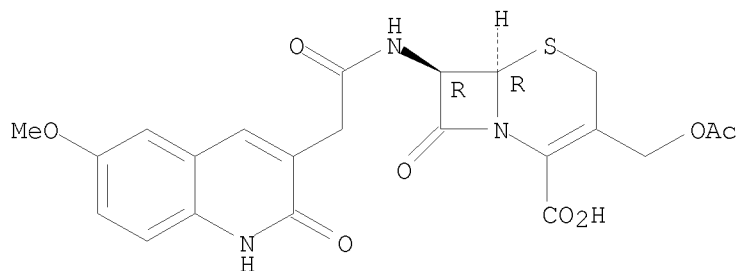
Absolute stereochemistry.



RN 121087-50-1 CAPLUS

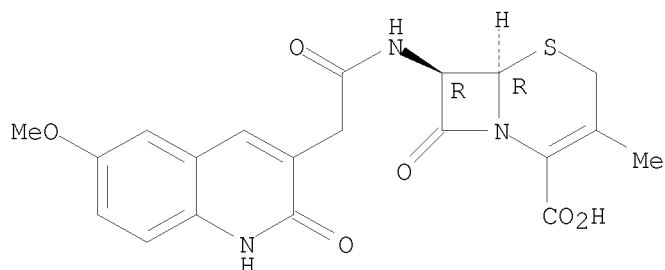
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-  
quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



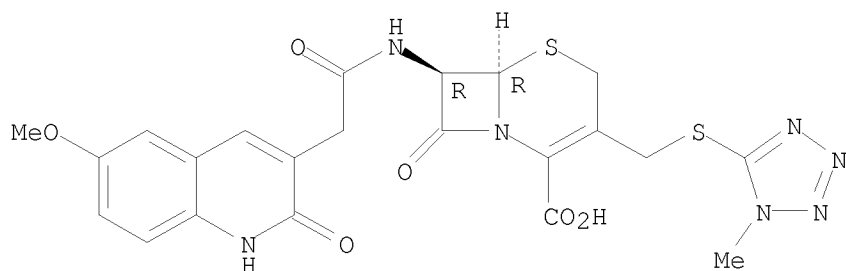
RN 121087-51-2 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
 , (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



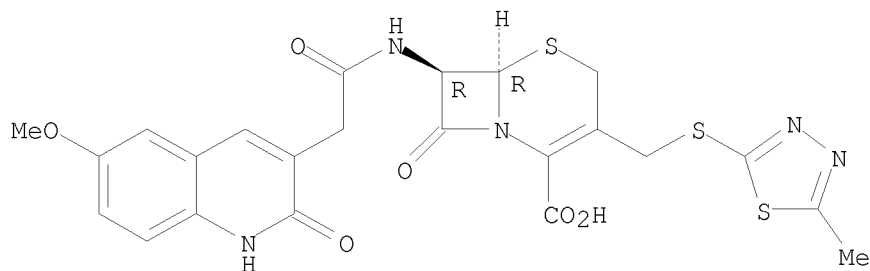
RN 121087-52-3 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-  
 1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



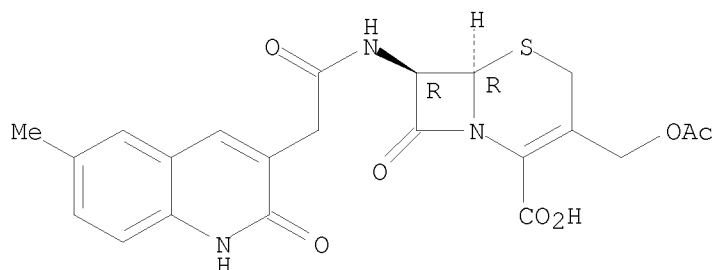
RN 121087-53-4 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-  
 1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.



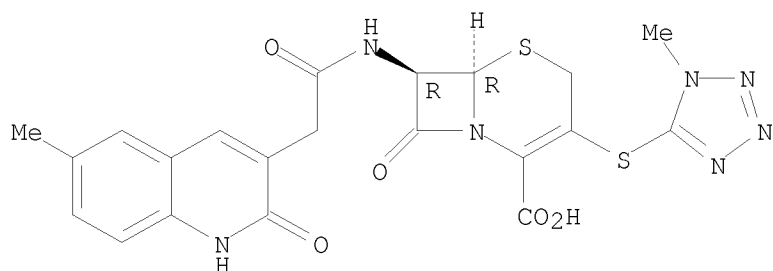
RN 121099-48-7 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[1,2-dihydro-6-methyl-2-oxo-3-  
 quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 125113-08-8 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[(1-methyl-1H-  
 tetrazol-5-yl)thio]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L28 ANSWER 125 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1991:449356 CAPLUS  
 DOCUMENT NUMBER: 115:49356  
 ORIGINAL REFERENCE NO.: 115:8561a,8564a  
 TITLE: Heterocycles. Part 9. A convenient synthesis of  
 2-isopropylfuro[2,3-b]quinolines  
 AUTHOR(S): Subramanian, M.; Shanmugam, P.; Prasad, K. J. Rajendra  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046,  
 India  
 SOURCE: Indian Journal of Chemistry, Section B: Organic

Chemistry Including Medicinal Chemistry (1991),  
30B(4), 422-4

CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE:

Journal

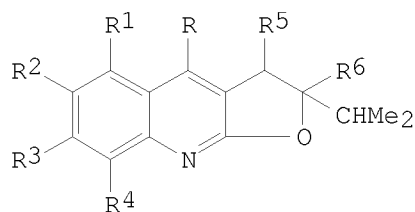
LANGUAGE:

English

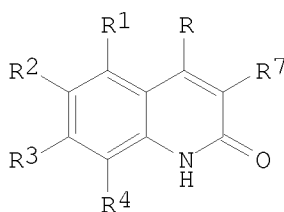
OTHER SOURCE(S):

CASREACT 115:49356

GI



I



II

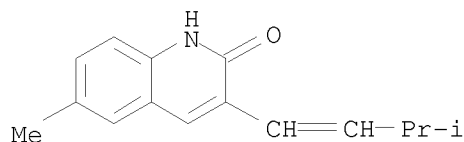
AB The title compds. I (R = 4-MeOC6H5, H, Ph, OMe; R1 = H, Me; R2 = H, Cl; R3R4 = CH:CHCH:CH; R3 = H, R4 = H, OMe; R5R6 = bond) were synthesized conveniently in good yields from 3-prenyl-2-quinolinones II (R7 = CH2CH:CHMe2) by treatment with HgO/iodine in the presence of AcOH. A similar reaction of II (R, R1, R2, R4 = H, Me, R3 = H, R7 = CH:CHCHMe2) with HgO/iodine in AcOH gives I (R5 = OAc, R6 = H; R5 = OH, R6 = H).

IT 82359-13-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclization of)

RN 82359-13-5 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-(3-methyl-1-butenyl)- (9CI) (CA INDEX NAME)



L28 ANSWER 126 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:192605 CAPLUS

DOCUMENT NUMBER: 114:192605

ORIGINAL REFERENCE NO.: 114:32353a,32356a

TITLE: Quinoxaline derivatives as blood platelet aggregation inhibitors

INVENTOR(S): Sumita, Yukio; Honda, Eiichi; Iwasaki, Masakazu; Ono, Masaru

PATENT ASSIGNEE(S): Toyo Jozo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

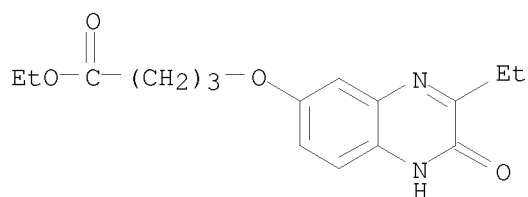
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02221223	A	19900904	JP 1989-43614	19890223
PRIORITY APPLN. INFO.:			JP 1989-43614	19890223
OTHER SOURCE(S):	MARPAT	114:192605		

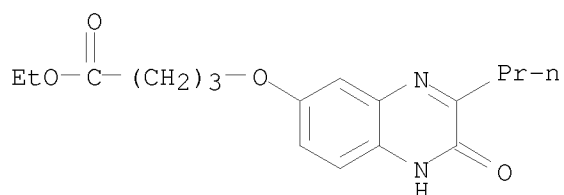
GI



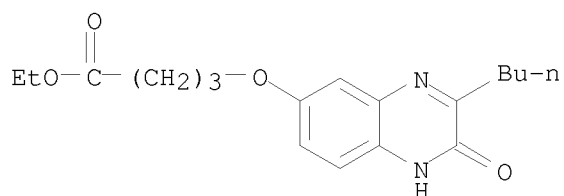




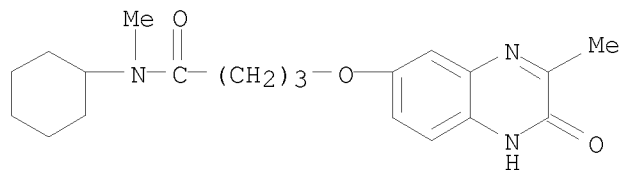
RN 123224-73-7 CAPLUS  
 CN Butanoic acid, 4-[(1,2-dihydro-2-oxo-3-propyl-6-quinoxalinyloxy]-, ethyl ester (CA INDEX NAME)



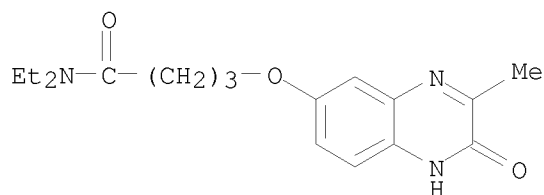
RN 123224-74-8 CAPLUS  
 CN Butanoic acid, 4-[(3-butyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]-, ethyl ester (CA INDEX NAME)



RN 123224-81-7 CAPLUS  
 CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy]-N-methyl- (CA INDEX NAME)

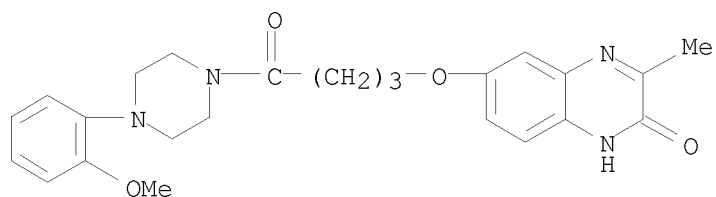


RN 123224-83-9 CAPLUS  
 CN Butanamide, 4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy]-N,N-diethyl- (CA INDEX NAME)



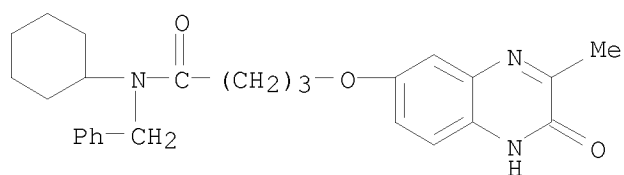
RN 123224-84-0 CAPLUS

CN Piperazine, 1-[4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-1-oxobutyl]-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



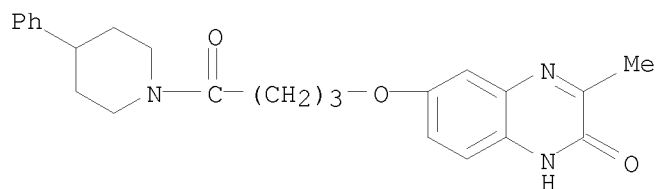
RN 123224-85-1 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-N-(phenylmethyl)- (CA INDEX NAME)



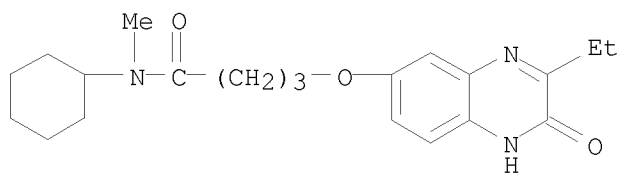
RN 123224-86-2 CAPLUS

CN Piperidine, 1-[4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-1-oxobutyl]-4-phenyl- (9CI) (CA INDEX NAME)



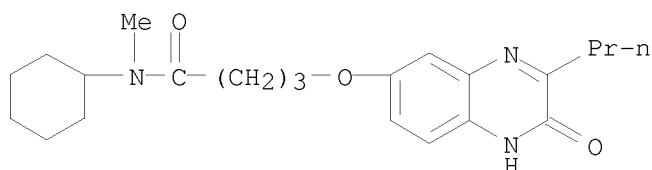
RN 123224-87-3 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-methyl- (CA INDEX NAME)



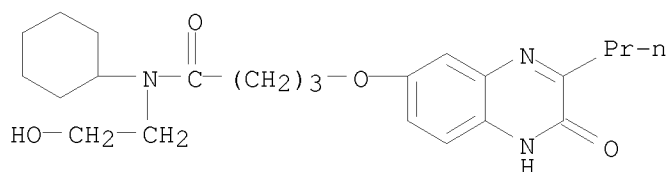
RN 123224-89-5 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-2-oxo-3-propyl-6-quinoxalinyloxy]-N-methyl- (CA INDEX NAME)



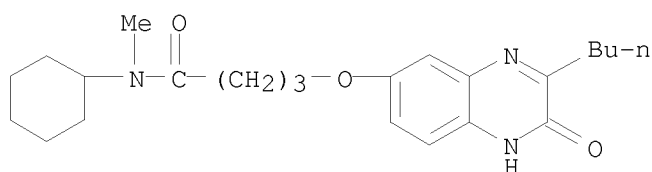
RN 123224-90-8 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-2-oxo-3-propyl-6-quinoxalinyloxy]-N-(2-hydroxyethyl)- (CA INDEX NAME)



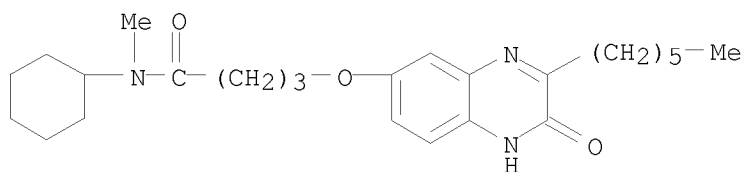
RN 123224-91-9 CAPLUS

CN Butanamide, 4-[(3-butyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]-N-cyclohexyl-N-methyl- (CA INDEX NAME)



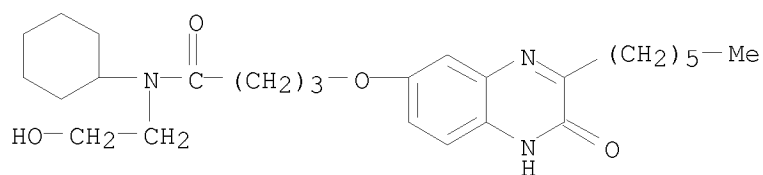
RN 123224-92-0 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(3-hexyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-methyl- (CA INDEX NAME)



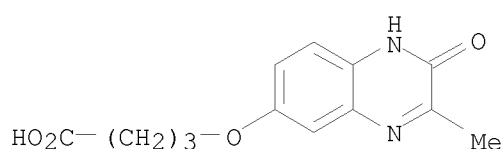
RN 123224-93-1 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(3-hexyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-(2-hydroxyethyl)- (CA INDEX NAME)



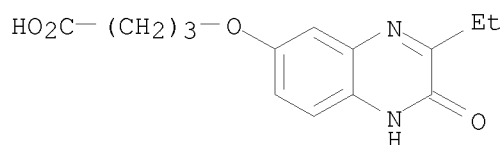
RN 123225-16-1 CAPLUS

CN Butanoic acid, 4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)- (CA INDEX NAME)



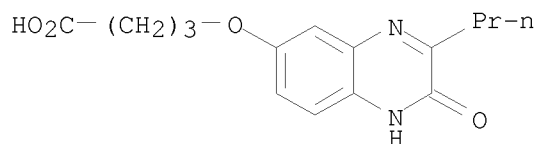
RN 123225-17-2 CAPLUS

CN Butanoic acid, 4-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)- (CA INDEX NAME)



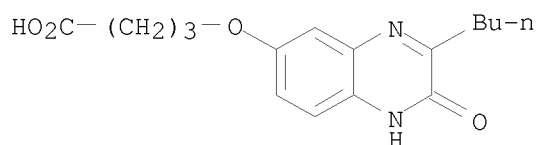
RN 123225-18-3 CAPLUS

CN Butanoic acid, 4-[(1,2-dihydro-2-oxo-3-propyl-6-quinoxalinyloxy)- (CA INDEX NAME)



RN 123225-19-4 CAPLUS

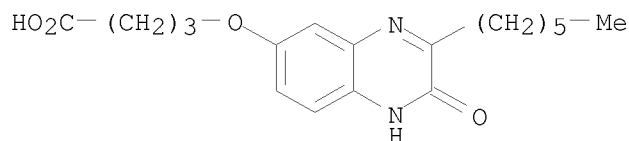
CN Butanoic acid, 4-[(3-butyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)- (CA INDEX NAME)



RN 123225-20-7 CAPLUS

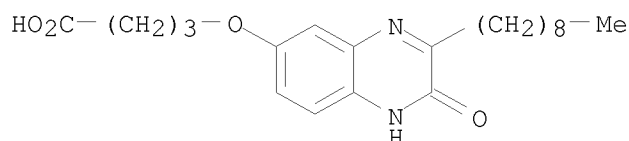
CN Butanoic acid, 4-[(3-hexyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)- (CA

INDEX NAME)



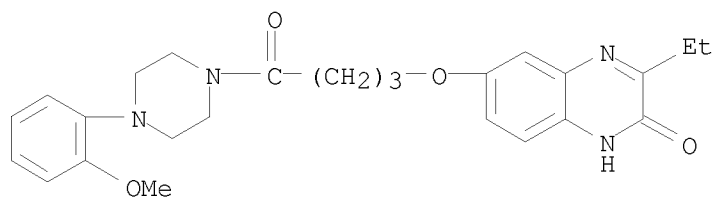
RN 123225-21-8 CAPLUS

CN Butanoic acid, 4-[(1,2-dihydro-3-nonyl-2-oxo-6-quinoxalinyloxy)]- (CA INDEX NAME)



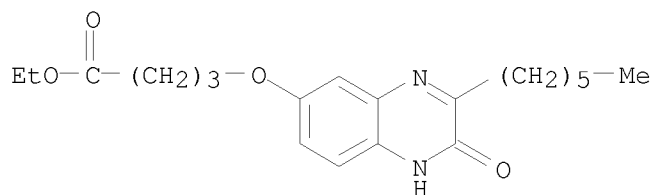
RN 123247-20-1 CAPLUS

CN Piperazine, 1-[4-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)]-1-oxobutyl]-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 133569-26-3 CAPLUS

CN Butanoic acid, 4-[(3-hexyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)]-, ethyl ester (CA INDEX NAME)



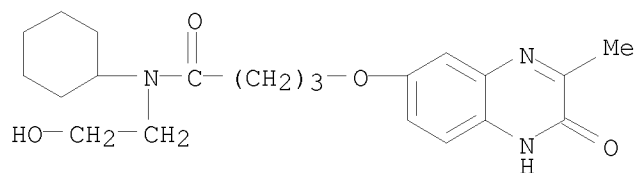
IT 123224-82-8P 123225-08-1P 123225-09-2P

RL: PREP (Preparation)

(preparation and blood platelet aggregation inhibitory activity of)

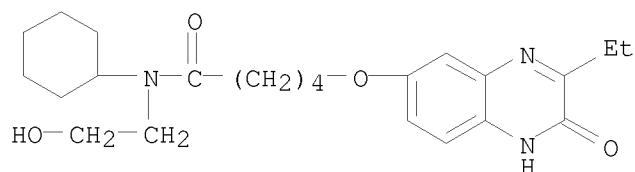
RN 123224-82-8 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)]-N-(2-hydroxyethyl)- (CA INDEX NAME)



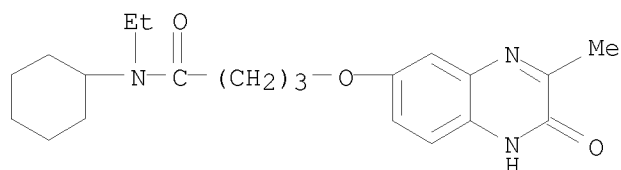
RN 123225-08-1 CAPLUS

CN Pentanamide, N-cyclohexyl-5-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-(2-hydroxyethyl)- (CA INDEX NAME)



RN 123225-09-2 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-N-ethyl- (CA INDEX NAME)



L28 ANSWER 127 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:143184 CAPLUS

DOCUMENT NUMBER: 114:143184

ORIGINAL REFERENCE NO.: 114:24293a, 24296a

TITLE: Studies on Vilsmeier-Haack reaction. A new route to 2-chloroquinoline-3-carboxyaldehydes and a furoquinoline derivative

AUTHOR(S): Pawar, R. A.; Bajare, P. B.; Mundade, S. B.

CORPORATE SOURCE: Dep. Chem., Dr. P. R. Ghogrey Sci. Coll., Dhule, 424 005, India

SOURCE: Journal of the Indian Chemical Society (1990), 67(8), 685-6

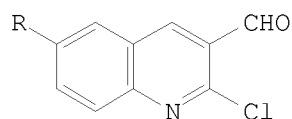
CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

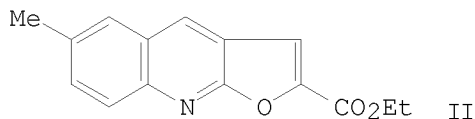
LANGUAGE: English

OTHER SOURCE(S): CASREACT 114:143184

GI



I



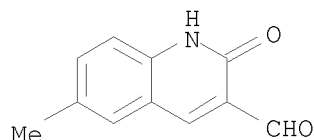
II

AB Quinolines I (R = H, Me, Br, OMe) were prepared via Vilsmeier-Haack reaction of p-RC<sub>6</sub>H<sub>4</sub>CMe:NOH. I (R = Me) was converted to furoquinoline II.

IT 101382-53-0P, 3-Formyl-6-methylquinolin-2-one  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and enol alkylation of, with chloroacetate)

RN 101382-53-0 CAPLUS

CN 3-Quinolinescarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



L28 ANSWER 128 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:81622 CAPLUS

DOCUMENT NUMBER: 114:81622

ORIGINAL REFERENCE NO.: 114:13929a,13932a

TITLE: Preparation of carbostyryl derivatives as inotropic cardiotonics and their formulations

INVENTOR(S): Tanaka, Michinori; Tamada, Shigeharu; Tsutsui, Yoshinori; Ei, Kazuyoshi; Tominaga, Michiaki; Yabuchi, Yoichi

PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.  
 CODEN: JKXXAF

DOCUMENT TYPE: Patent

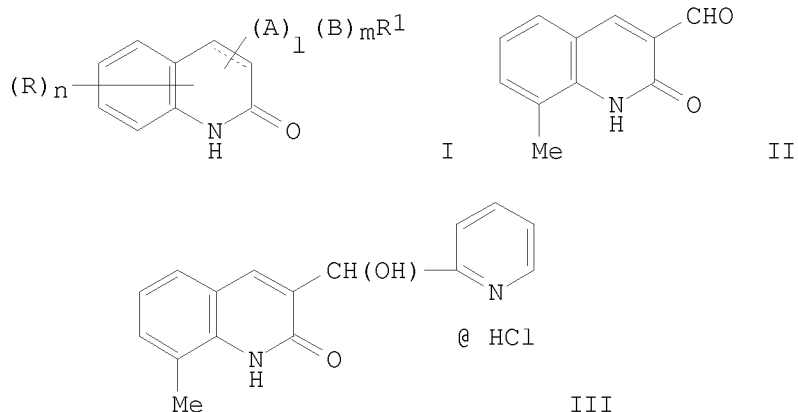
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02229165	A	19900911	JP 1989-50584	19890302
PRIORITY APPLN. INFO.:			JP 1989-50584	19890302
OTHER SOURCE(S):		MARPAT 114:81622		

GI



AB Carboxtyryl derivs. [I; R = H, alkyl, alkoxy, (substituted) amino,



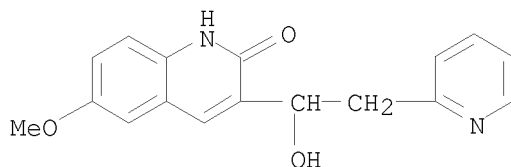
heterocyclyl, etc.; A = CH(OH), alkoxymethylene, acyloxymethylene, CH:CH, CO; B = alkylene; R1 = (substituted) pyridyl, piperidinyl, etc.; 1, m = 0, 1, n = 1, 2] are prepared BuLi in hexane was added to a solution of 10 g 2-bromopyridine in EtO at -30° to -20° with stirring, followed by 4.0 g aldehyde II in THF at -30° and aqueous NH4Cl to give 2.1 g salt III, which showed inotropic cardiotonic activity at 10-100 μmol in cats. Also prepared were 44 addnl. I.

IT 132070-29-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as inotropic cardiotonic agent)

RN 132070-29-2 CAPLUS

CN 2(1H)-Quinolinone, 3-[1-hydroxy-2-(2-pyridinyl)ethyl]-6-methoxy-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L28 ANSWER 129 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:61746 CAPLUS

DOCUMENT NUMBER: 114:61746

ORIGINAL REFERENCE NO.: 114:10583a,10586a

TITLE: Proton NMR spectra of 7β-(6-substituted-2-quinolone-3-acetamido)- and 7β-(6-substituted-4-hydroxyquinoline-3-formamido)-cephalosporins

AUTHOR(S): Chen, Qingping; Duan, Tinghan; Zhou, Huishu

CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, Peop. Rep. China

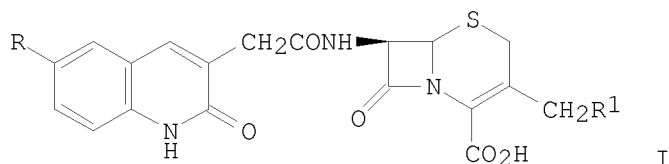
SOURCE: Kangshengsu (1990), 15(1), 20-6

CODEN: KANGDS; ISSN: 0254-6116

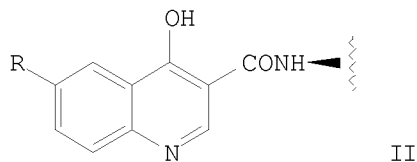
DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I



II

AB 1H-NMR spectra and reported for cephalosporins I (R = H, Cl, Me, OMe, R1 =

H, OAc, 1-methyl-5-tetrazolylthio, 5-methyl-1,3,4-thiadiazol-2-ylthio) and  
 II (R = NO<sub>2</sub>, R1 = H; R = Cl, R1 = OAc; R = Me, R1 = 1-methyl-5-  
 tetrazolylthio; R = OMe, R1 = 5-methyl-1,3,4-thiadiazol-2-ylthio).

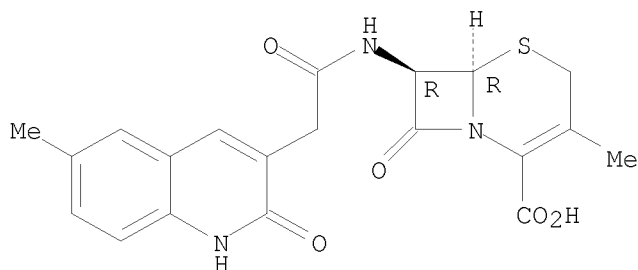
IT 121087-47-6 121087-48-7 121087-49-8  
 121087-50-1 121087-51-2 121087-52-3  
 121087-53-4 121099-48-7

RL: PRP (Properties)  
 (NMR of)

RN 121087-47-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
 , (6R-trans)- (9CI) (CA INDEX NAME)

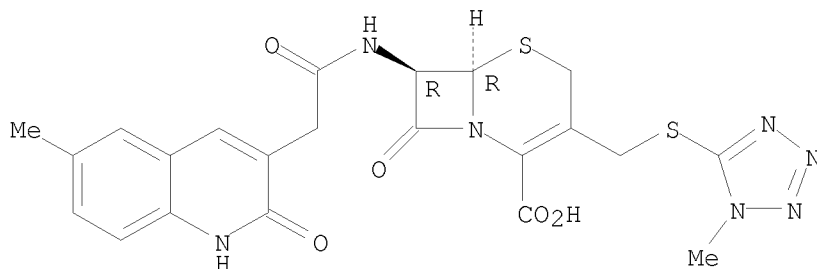
Absolute stereochemistry.



RN 121087-48-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-  
 1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

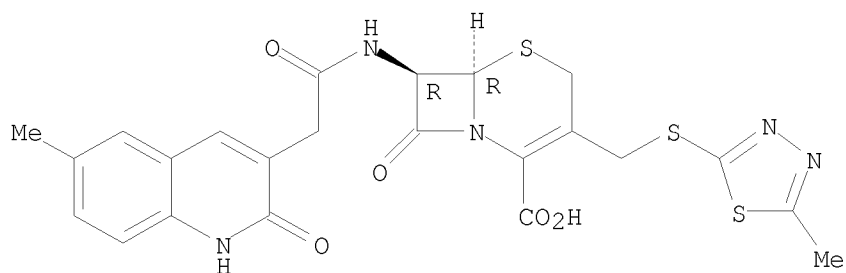
Absolute stereochemistry.



RN 121087-49-8 CAPLUS

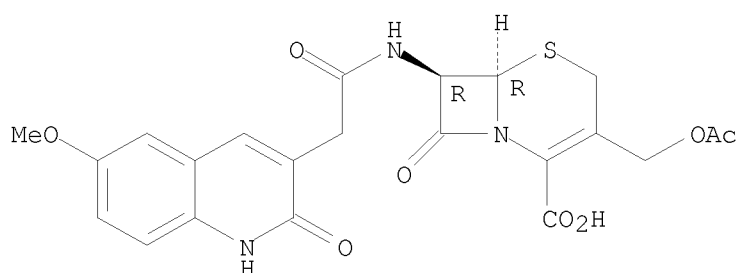
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-  
 1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.



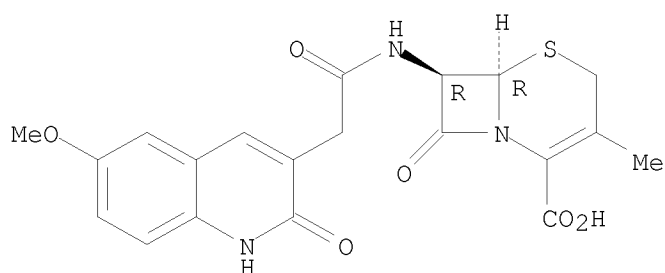
RN 121087-50-1 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-  
 quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



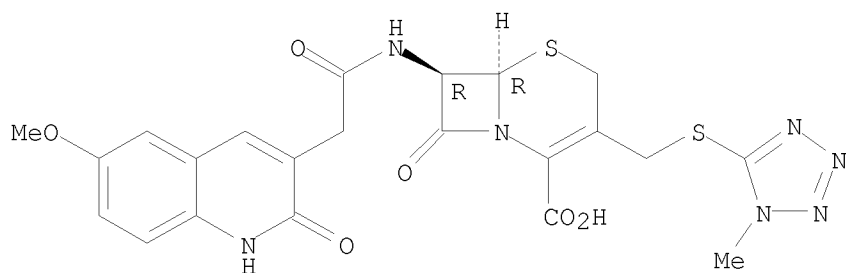
RN 121087-51-2 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
 , (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



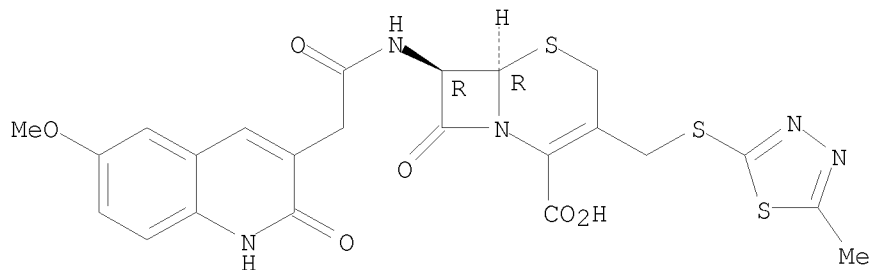
RN 121087-52-3 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-  
 1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



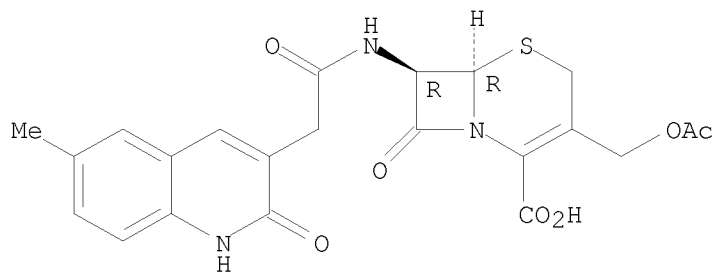
RN 121087-53-4 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[ (1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[ (5-methyl-  
 1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.



RN 121099-48-7 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[ (1,2-dihydro-6-methyl-2-oxo-3-  
 quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L28 ANSWER 130 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:612014 CAPLUS  
 DOCUMENT NUMBER: 113:212014  
 ORIGINAL REFERENCE NO.: 113:35835a,35838a  
 TITLE: Preparation of (1H-azol-1-ylmethyl)quinolines,  
 -quinazolines, and -quinoxalines as drugs  
 INVENTOR(S): Freyne, Eddy Jean Edgard; Venet, Marc Gaston;  
 Raeymaekers, Alfons Herman Margaretha; Sanz, Gerard  
 Charles

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.  
 SOURCE: Eur. Pat. Appl., 106 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 371564	A2	19900606	EP 1989-203014	19891128
EP 371564	A3	19910529		
EP 371564	B1	19950712		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5028606	A	19910702	US 1989-434957	19891113
US 5037829	A	19910806	US 1989-435120	19891113
CA 2002864	A1	19900529	CA 1989-2002864	19891114
CA 2002864	C	19991116		
DK 8905994	A	19900530	DK 1989-5994	19891128
DK 172748	B1	19990628		
NO 8904734	A	19900530	NO 1989-4734	19891128
NO 174509	B	19940207		
NO 174509	C	19940518		
AU 8945646	A	19900607	AU 1989-45646	19891128
AU 620946	B2	19920227		
HU 52498	A2	19900728	HU 1989-6220	19891128
HU 205106	B	19920330		
ZA 8909076	A	19910731	ZA 1989-9076	19891128
SU 1780536	A3	19921207	SU 1989-4742543	19891128
IL 92486	A	19930708	IL 1989-92486	19891128
ES 2088889	T3	19961001	ES 1989-203014	19891128
FI 101964	B	19980930	FI 1989-5687	19891128
FI 101964	B1	19980930		
CN 1042912	A	19900613	CN 1989-108925	19891129
CN 1033752	B	19970108		
JP 02223579	A	19900905	JP 1989-307793	19891129
JP 2916181	B2	19990705		
US 5151421	A	19920929	US 1991-672298	19910320
US 5185346	A	19930209	US 1991-704746	19910523
US 5268380	A	19931207	US 1992-973871	19921110
US 5441954	A	19950815	US 1993-131817	19931005
CN 1106004	A	19950802	CN 1994-117801	19941102
CN 1036002	B	19971001		
CN 1106005	A	19950802	CN 1994-117802	19941102
CN 1036003	B	19971001		
US 5612354	A	19970318	US 1995-409551	19950323
PRIORITY APPLN. INFO.:			GB 1988-27820	A 19881129
			GB 1988-27821	A 19881129
			GB 1988-27822	A 19881129
			US 1989-434205	B2 19891113
			US 1989-434957	A3 19891113
			US 1991-704746	A3 19910523
			US 1992-973871	A3 19921110
			US 1993-131817	A3 19931005

OTHER SOURCE(S): MARPAT 113:212014

GI For diagram(s), see printed CA Issue.

AB The title compds. [I; R = H, alkyl; X1:X2 = CH:CH, CH:N, N:CH; Y = H, alkyl, cycloalkyl, alkenyl, alkynyl, (un)substituted aryl, aralkyl; Z = (un)substituted (oxo)quinolinyl, (oxo- or thioxo)quinazolinyl, (oxo- or dioxo)quinoxalinyl] were prepared as retinoic acid metabolism inhibitors, aromatase inhibitors, etc. Thus, 3,4-dihydroquinolin-2(1H)-one was stirred 2 h at 70° with BzCl in DMF containing AlCl3 and the product

reduced by NaBH<sub>4</sub> to give hydroxymethylquinolinone II (R<sub>1</sub> = Ph, R<sub>2</sub> = OH). II (R<sub>1</sub> = Me, R<sub>2</sub> = OH) was stirred overnight with SOCl<sub>2</sub> in THF and the product II (R<sub>1</sub> = Me, R<sub>2</sub> = Cl) stirred overnight at 60-70° with 1H-imidazole in DMSO to give II (R<sub>1</sub> = Me, R<sub>2</sub> = imidazo) which maintained plasma levels of i.v. administered all-trans-retinoic acid at ≥10 ng/mL in rats 2 h after oral administration of 40 mg/kg.

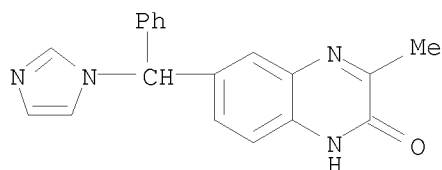
IT 130346-18-8P 130346-22-4P 130346-23-5P  
 130346-25-7P 130346-26-8P 130346-27-9P  
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 130346-48-4P 130346-52-0P 130346-53-1P  
 130346-55-3P 130346-56-4P 130346-58-6P  
 130346-59-7P 130346-65-5P 130346-66-6P  
 130346-68-8P 130346-69-9P 130346-72-4P  
 130346-77-9P 130346-98-4P 130347-01-2P  
 130347-23-8P 130347-28-3P 130347-30-7P  
 130347-31-8P 130347-37-4P 130347-39-6P  
 130347-41-0P 130347-78-3P 130368-36-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as retinoate metabolism and aromatase inhibitor)

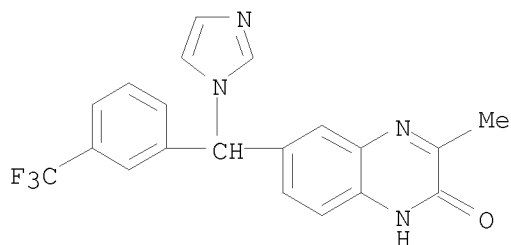
RN 130346-18-8 CAPLUS

CN 2(1H)-Quinoxalinone, 6-(1H-imidazol-1-ylphenylmethyl)-3-methyl- (CA INDEX NAME)



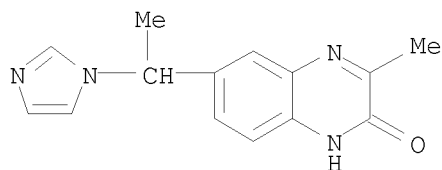
RN 130346-22-4 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[1H-imidazol-1-yl[3-(trifluoromethyl)phenyl]methyl]-3-methyl- (CA INDEX NAME)



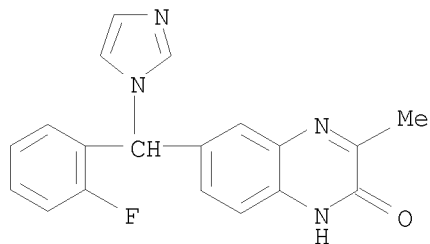
RN 130346-23-5 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[1-(1H-imidazol-1-yl)ethyl]-3-methyl- (CA INDEX NAME)



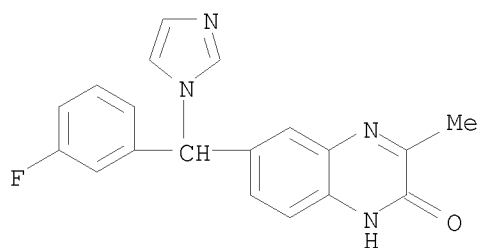
RN 130346-25-7 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[(2-fluorophenyl)-1H-imidazol-1-ylmethyl]-3-methyl-  
(CA INDEX NAME)



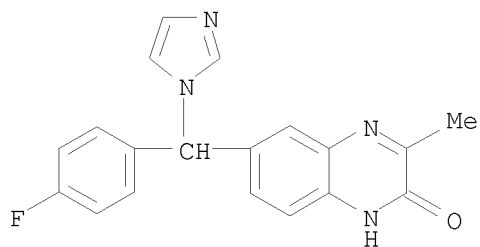
RN 130346-26-8 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[(3-fluorophenyl)-1H-imidazol-1-ylmethyl]-3-methyl-  
(CA INDEX NAME)



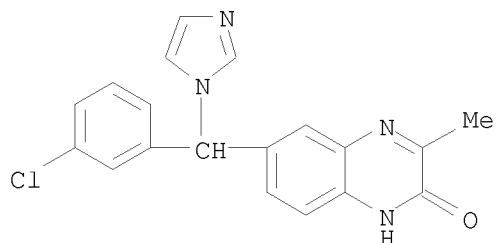
RN 130346-27-9 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[(4-fluorophenyl)-1H-imidazol-1-ylmethyl]-3-methyl-  
(CA INDEX NAME)

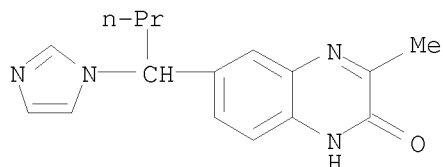


RN 130346-30-4 CAPLUS

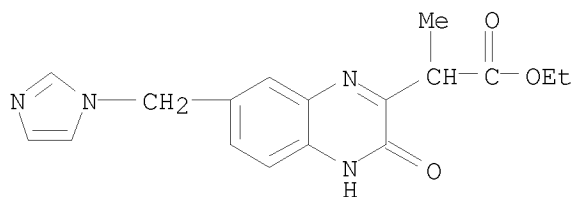
CN 2(1H)-Quinoxalinone, 6-[(3-chlorophenyl)-1H-imidazol-1-ylmethyl]-3-methyl-  
(CA INDEX NAME)



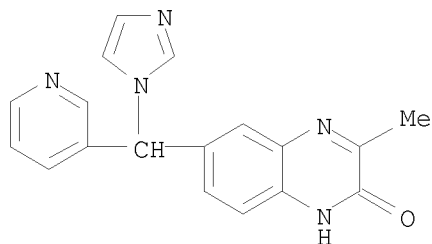
RN 130346-34-8 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-[1-(1H-imidazol-1-yl)butyl]-3-methyl- (CA INDEX NAME)



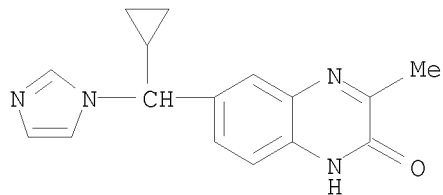
RN 130346-43-9 CAPLUS  
 CN 2-Quinoxalineacetic acid, 3,4-dihydro-7-(1H-imidazol-1-ylmethyl)- $\alpha$ -methyl-3-oxo-, ethyl ester (CA INDEX NAME)



RN 130346-48-4 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-(1H-imidazol-1-yl-3-pyridinylmethyl)-3-methyl- (CA INDEX NAME)

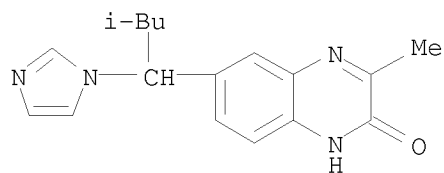


RN 130346-52-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-(cyclopropyl-1H-imidazol-1-ylmethyl)-3-methyl- (CA INDEX NAME)

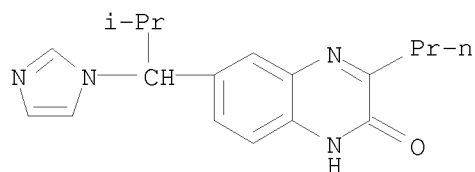


RN 130346-53-1 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-[1-(1H-imidazol-1-yl)-3-methylbutyl]-3-methyl- (CA INDEX NAME)

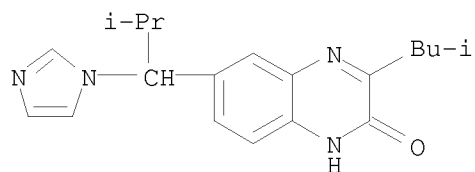




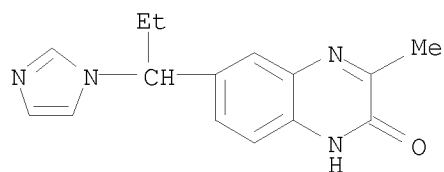
RN 130346-55-3 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-[1-(1H-imidazol-1-yl)-2-methylpropyl]-3-propyl-  
 (CA INDEX NAME)



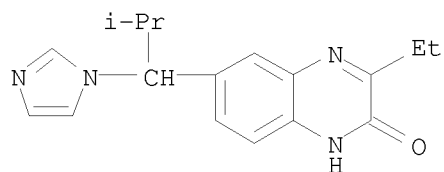
RN 130346-56-4 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-[1-(1H-imidazol-1-yl)-2-methylpropyl]-3-(2-  
 methylpropyl)- (CA INDEX NAME)



RN 130346-58-6 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-[1-(1H-imidazol-1-yl)propyl]-3-methyl- (CA INDEX  
 NAME)

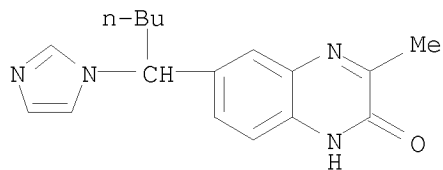


RN 130346-59-7 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-ethyl-6-[1-(1H-imidazol-1-yl)-2-methylpropyl]- (CA  
 INDEX NAME)



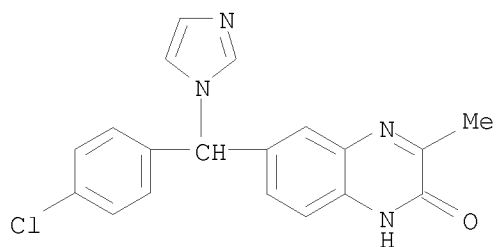
RN 130346-65-5 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[1-(1H-imidazol-1-yl)pentyl]-3-methyl- (CA INDEX NAME)



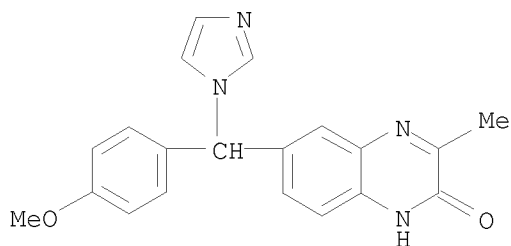
RN 130346-66-6 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[(4-chlorophenyl)-1H-imidazol-1-ylmethyl]-3-methyl- (CA INDEX NAME)



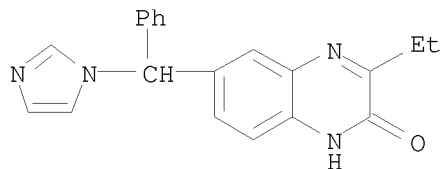
RN 130346-68-8 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[(1H-imidazol-1-yl)(4-methoxyphenyl)methyl]-3-methyl- (9CI) (CA INDEX NAME)



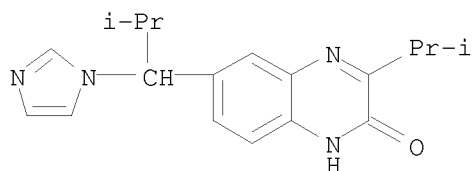
RN 130346-69-9 CAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-6-(1H-imidazol-1-ylphenylmethyl)- (CA INDEX NAME)



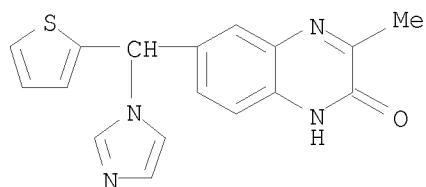
RN 130346-72-4 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[1-(1H-imidazol-1-yl)-2-methylpropyl]-3-(1-methylethyl)- (CA INDEX NAME)



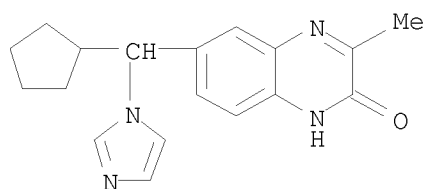
RN 130346-77-9 CAPLUS

CN 2(1H)-Quinoxalinone, 6-(1H-imidazol-1-yl-2-thienylmethyl)-3-methyl- (CA INDEX NAME)



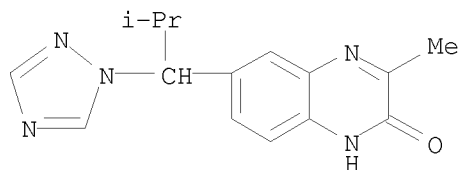
RN 130346-98-4 CAPLUS

CN 2(1H)-Quinoxalinone, 6-(cyclopentyl-1H-imidazol-1-ylmethyl)-3-methyl- (CA INDEX NAME)



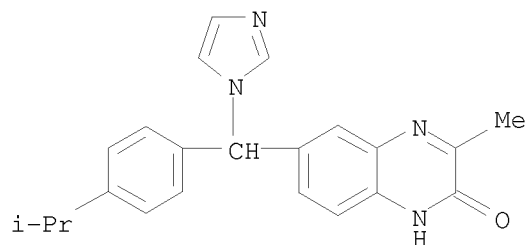
RN 130347-01-2 CAPLUS

CN 2(1H)-Quinoxalinone, 3-methyl-6-[2-methyl-1-(1H-1,2,4-triazol-1-yl)propyl]- (CA INDEX NAME)

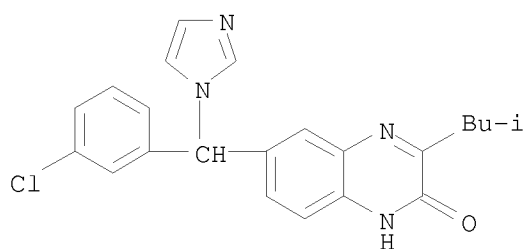


RN 130347-23-8 CAPLUS

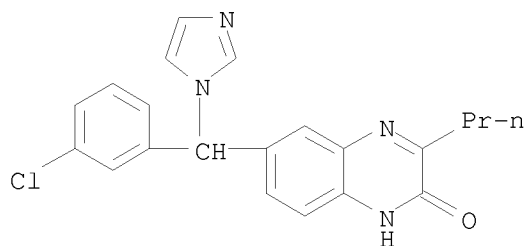
CN 2(1H)-Quinoxalinone, 6-[1H-imidazol-1-yl[4-(1-methylethyl)phenyl]methyl]-3-methyl- (CA INDEX NAME)



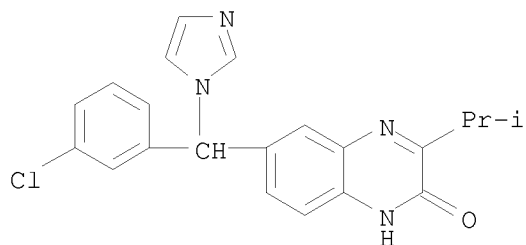
RN 130347-28-3 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-[(3-chlorophenyl)-1H-imidazol-1-ylmethyl]-3-(2-methylpropyl)- (CA INDEX NAME)



RN 130347-30-7 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-[(3-chlorophenyl)-1H-imidazol-1-ylmethyl]-3-propyl- (CA INDEX NAME)

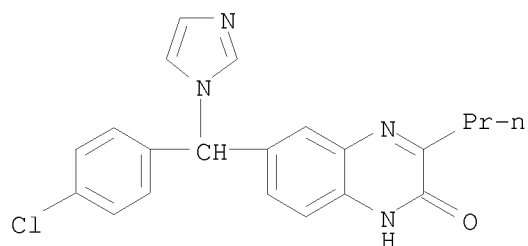


RN 130347-31-8 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-[(3-chlorophenyl)-1H-imidazol-1-ylmethyl]-3-(1-methylethyl)- (CA INDEX NAME)



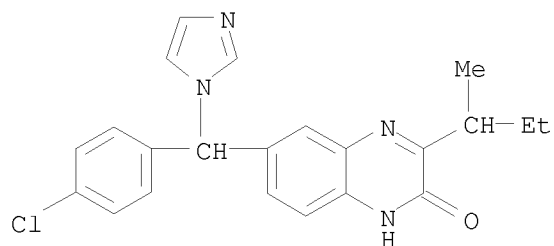
RN 130347-37-4 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-[(4-chlorophenyl)-1H-imidazol-1-ylmethyl]-3-propyl-

(CA INDEX NAME)



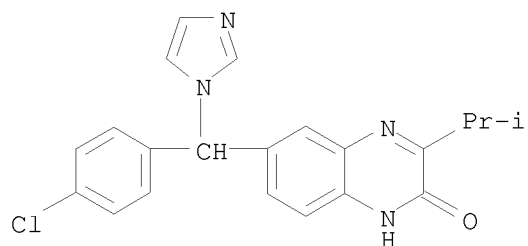
RN 130347-39-6 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[(4-chlorophenyl)-1H-imidazol-1-ylmethyl]-3-(1-methylpropyl)- (CA INDEX NAME)



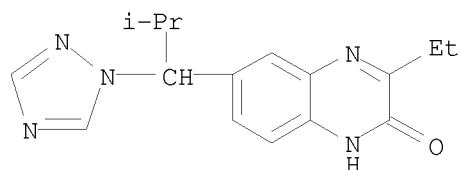
RN 130347-41-0 CAPLUS

CN 2(1H)-Quinoxalinone, 6-[(4-chlorophenyl)-1H-imidazol-1-ylmethyl]-3-(1-methylethyl)- (CA INDEX NAME)



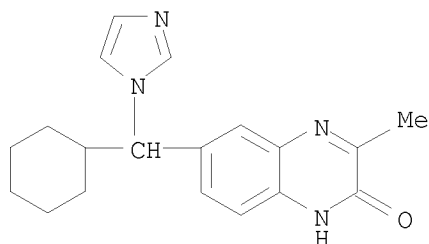
RN 130347-78-3 CAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-6-[2-methyl-1-(1H-1,2,4-triazol-1-yl)propyl]- (CA INDEX NAME)

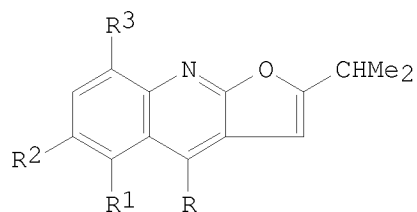


RN 130368-36-4 CAPLUS

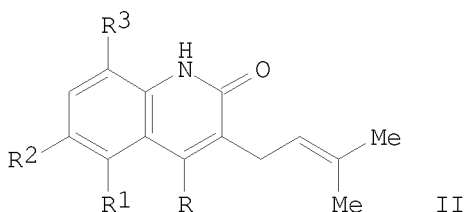
CN 2(1H)-Quinoxalinone, 6-(cyclohexyl-1H-imidazol-1-ylmethyl)-3-methyl- (CA INDEX NAME)



L28 ANSWER 131 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:459631 CAPLUS  
 DOCUMENT NUMBER: 113:59631  
 ORIGINAL REFERENCE NO.: 113:10103a,10106a  
 TITLE: A convenient one-step synthesis of  
 2-isopropylfuro[2,3-b]quinolines from  
 3-prenyl-2-quinolones  
 AUTHOR(S): Subramaniam, M.; Prasad, K. J. Rajendra; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046,  
 India  
 SOURCE: Synthesis (1989), (10), 777-8  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 113:59631  
 GI

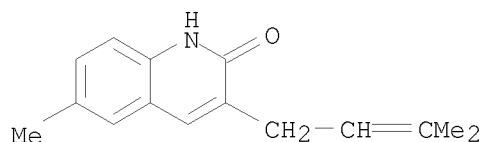


I



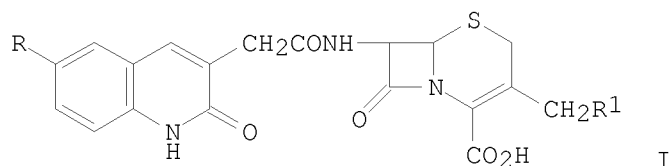
II

AB Six isopropylfuroquinolines I (R, R3 = H, Me, MeO; R1, R2 = H, Me) were  
 prepared in 54-70% yield by cyclization of the prenylquinolinones II by  
 treatment with iodine in presence of HgO.  
 IT 82359-17-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (intramol. cyclization of, isopropylfuroquinoline derivative from)  
 RN 82359-17-9 CAPLUS  
 CN 2(1H)-Quinolinone, 6-methyl-3-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)

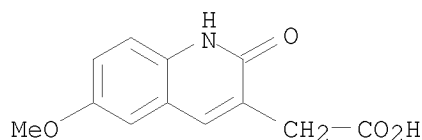


L28 ANSWER 132 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:178414 CAPLUS

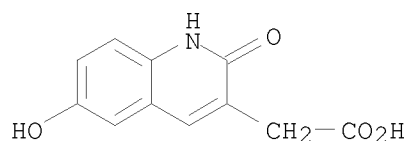
DOCUMENT NUMBER: 112:178414  
 ORIGINAL REFERENCE NO.: 112:30165a, 30168a  
 TITLE: Synthesis of 7 $\beta$ -(6-substituted-2-quinolone-3-acetamido)cephalosporins  
 AUTHOR(S): Chen, Q. P.; Duan, T. H.; Zhou, H. S.  
 CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, 210009, Peop. Rep. China  
 SOURCE: Yaoxue Xuebao (1989), 24(9), 659-67  
 CODEN: YHHPAL; ISSN: 0513-4870  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 GI



AB Title compds. I (R = H, Cl, Me, MeO; R1 = H, AcO, N-methyltetrazolylthio, methylthiadiazolylthio) were prepared from condensation of quinolonecarboxylic acids with aminocephemcarboxylates. I showed bactericidal activity comparable to that of Cefazolin.  
 IT 64124-71-6P 126495-53-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and amidation of, with aminocephalosporonic acid)  
 RN 64124-71-6 CAPLUS  
 CN 3-Quinoloneacetic acid, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



RN 126495-53-2 CAPLUS  
 CN 3-Quinoloneacetic acid, 1,2-dihydro-6-hydroxy-2-oxo- (CA INDEX NAME)

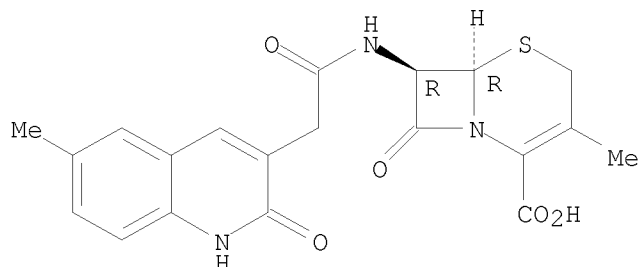


IT 121087-47-6P 121087-48-7P 121087-49-8P  
 121087-50-1P 121087-51-2P 121087-52-3P  
 121087-53-4P 121099-48-7P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and bactericidal activity of)

RN 121087-47-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
, (6R-trans)- (9CI) (CA INDEX NAME)

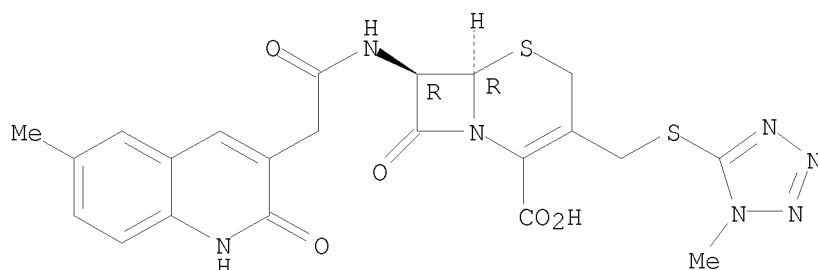
Absolute stereochemistry.



RN 121087-48-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-  
1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

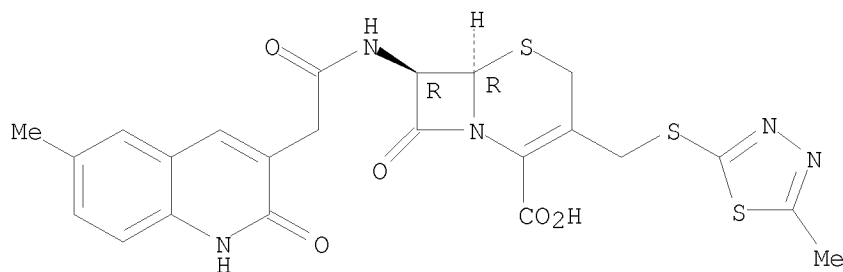
Absolute stereochemistry.



RN 121087-49-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-  
1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

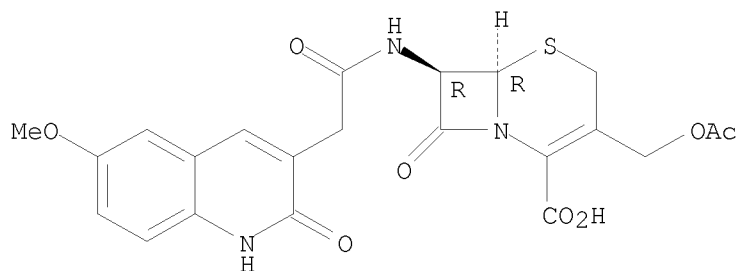


RN 121087-50-1 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-  
quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

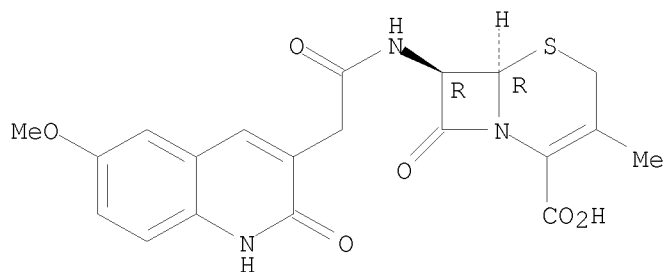


Absolute stereochemistry.



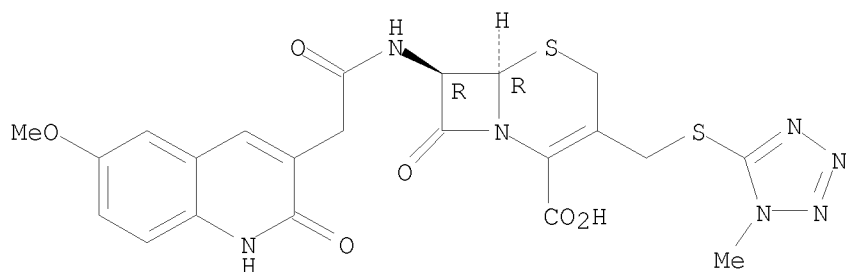
RN 121087-51-2 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



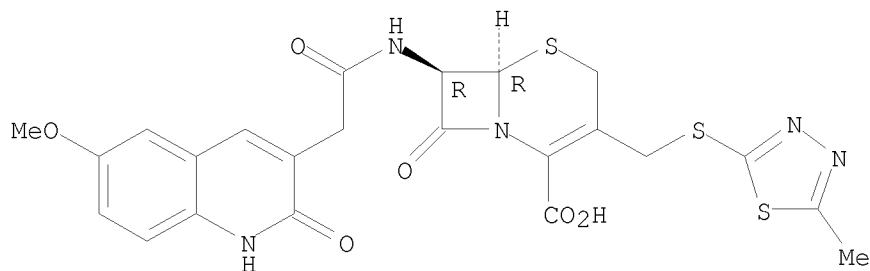
RN 121087-52-3 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-  
1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



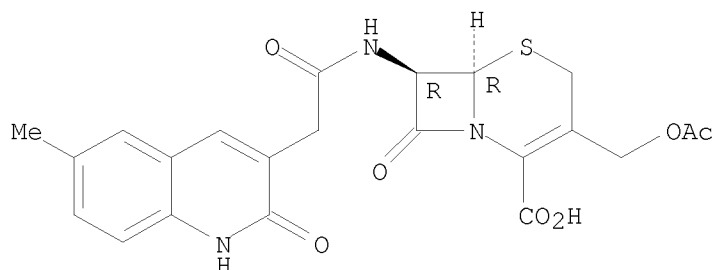
RN 121087-53-4 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-  
1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

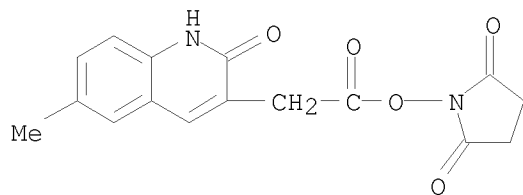


RN 121099-48-7 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-6-methyl-2-oxo-3-  
 quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 126495-54-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and condensation of, with aminocephalosporanic acid)  
 RN 126495-54-3 CAPLUS  
 CN 2,5-Pyrrolidinedione, 1-[[[(1,2-dihydro-6-methyl-2-oxo-3-  
 quinolinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



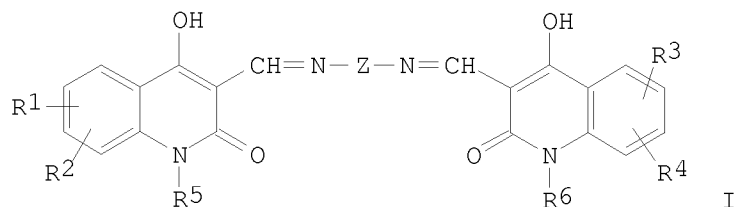
L28 ANSWER 133 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:140578 CAPLUS  
 DOCUMENT NUMBER: 112:140578  
 ORIGINAL REFERENCE NO.: 112:23769a, 23772a  
 TITLE: Thermoplastics containing nickel complex pigments with  
 stability during melt processing  
 INVENTOR(S): Lienhard, Paul; Jaffe, Edward E.  
 PATENT ASSIGNEE(S): Ciba-Geigy Corp., USA  
 SOURCE: U.S., 7 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4866112	A	19890912	US 1988-226358	19880729
EP 354178	A1	19900207	EP 1989-810552	19890720
R: CH, DE, FR, GB, IT, LI				
JP 02088654	A	19900328	JP 1989-196472	19890728
PRIORITY APPLN. INFO.:			US 1988-226358	A 19880729

GI



AB Ni complexes of compds. I (R1-4 = H, halo, Me; R5-6 = H, C1-4 alkyl; Z = p- or o-C6H4 optionally containing substituents) are resistant to heat and light and useful as pigments in melt-processable thermoplastics. Thus, 0.6 g powdered 1:1 Ni complex of I (R1-6 = H; Z = p-C6H4) was mixed with PVC 67, DOP 33, dibutyltin dilaurate 2, and TiO2 2 g and processed in a roll mill for 15 min at 160° to form a greenish yellow film.

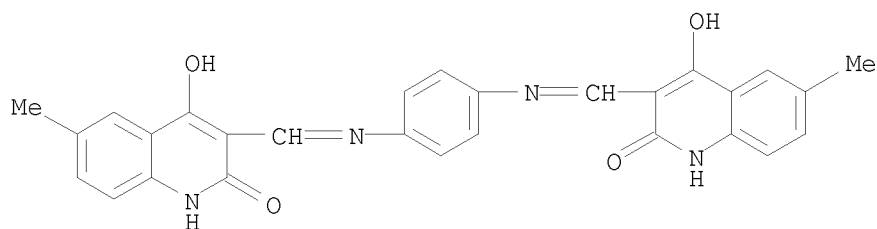
IT 125598-90-5D, nickel complex

RL: USES (Uses)

(pigment, heat- and light-resistant, for thermoplastics)

RN 125598-90-5 CAPLUS

CN 2(1H)-Quinolinone, 3,3'-[1,4-phenylenebis(nitrilomethylidyne)]bis[4-hydroxy-6-methyl- (9CI) (CA INDEX NAME)



L28 ANSWER 134 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:83945 CAPLUS

DOCUMENT NUMBER: 112:83945

ORIGINAL REFERENCE NO.: 112:14207a,14210a

TITLE: Preparative separation of cephalosporins by centrifugal TLC

AUTHOR(S): Chen, Qingping; Zhou, Jiacheng; Duan, Tinghan; Zhou, Huishu

CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, Peop. Rep. China

SOURCE: Kangshengsu (1989), 14(3), 161-7  
CODEN: KANGDS; ISSN: 0254-6116

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

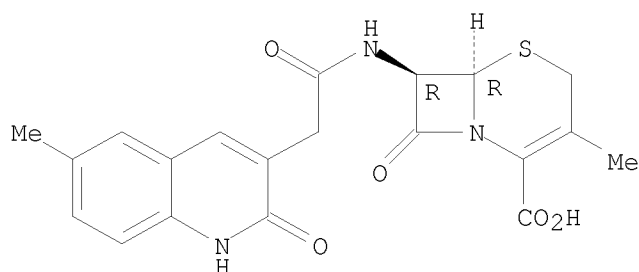
AB Synthetic cephalosporin products were isolated by centrifugal TLC. This separation technique is satisfactorily applied to the purification of 2 series of cephalosporins. The operating conditions including preparation and reuse of coating layer, selection of the solvent, limit of separation quantity, separation time etc. were studied. Centrifugal TLC is a simple and very rapid technique for the preparative separation or purification of cephalosporins and has the advantage of lower cost, less time and better availability. This method is much more suitable for the separation and purification of unstable substances like cephalosporins.

IT 121087-47-6 121087-49-8 121087-50-1  
 121087-51-2 121087-52-3 121087-53-4  
 121099-48-7 125113-08-8  
 RL: PROC (Process)  
 (separation of, preparative, by centrifugal TLC)

RN 121087-47-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
 , (6R-trans)- (9CI) (CA INDEX NAME)

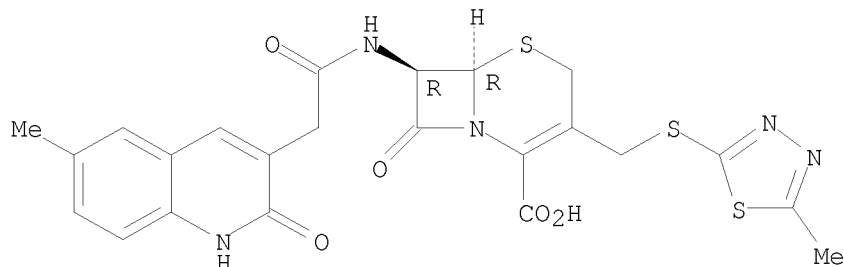
Absolute stereochemistry.



RN 121087-49-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-  
 1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
 NAME)

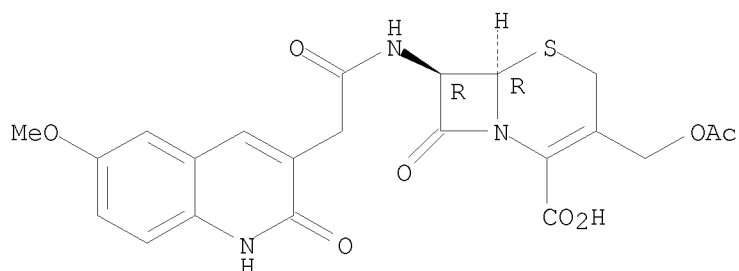
Absolute stereochemistry.



RN 121087-50-1 CAPLUS

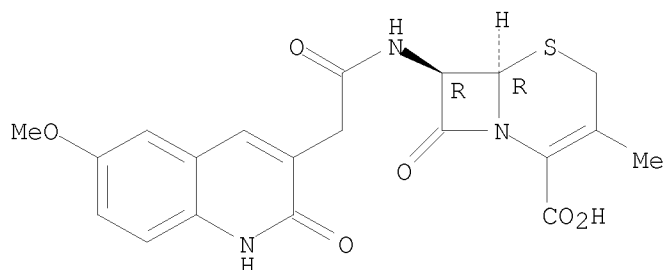
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-  
 quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



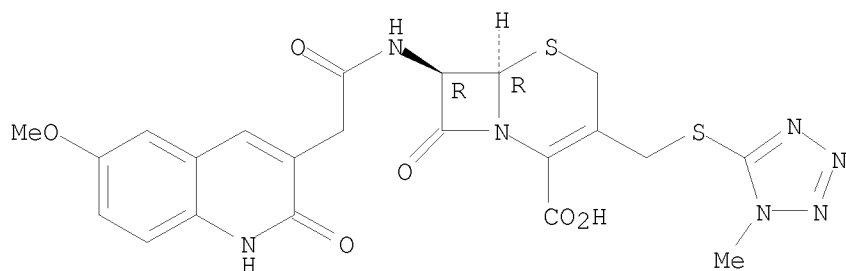
RN 121087-51-2 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
 , (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



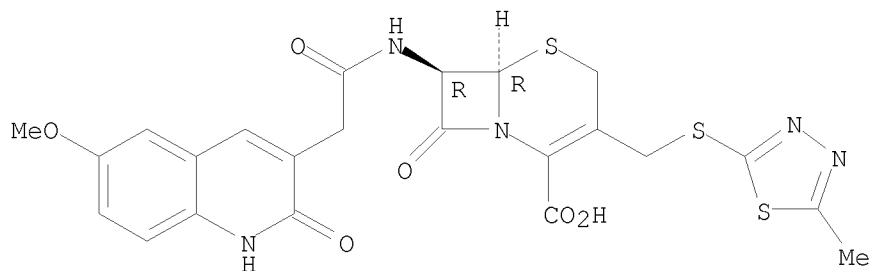
RN 121087-52-3 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-  
 1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



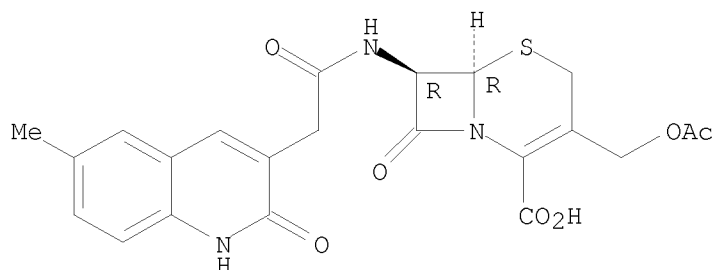
RN 121087-53-4 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-  
 1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.



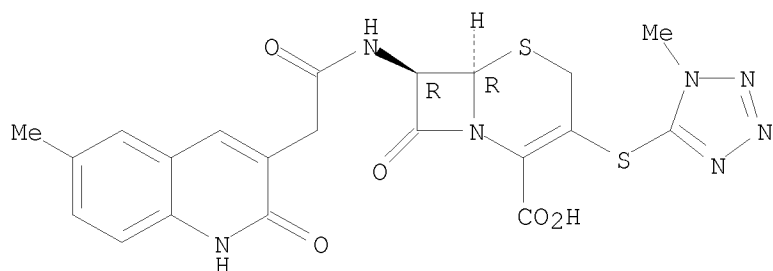
RN 121099-48-7 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 125113-08-8 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[(1-methyl-1H-tetrazol-5-yl)thio]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

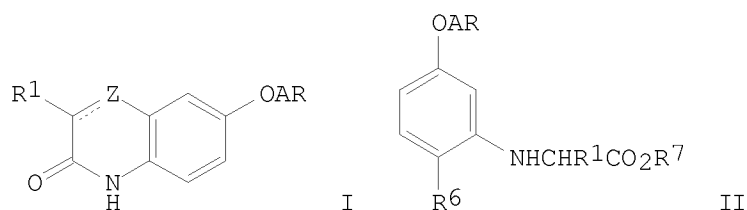
Absolute stereochemistry.



L28 ANSWER 135 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:632856 CAPLUS  
 DOCUMENT NUMBER: 111:232856  
 ORIGINAL REFERENCE NO.: 111:38689a,38692a  
 TITLE: Preparation of 2-oxo-1,2-dihydroquinoxalines as  
 phosphodiesterase and blood platelet aggregation  
 inhibitors  
 INVENTOR(S): Suzuki, Yukio; Yaso, Masao; Nishimura, Katumi; Saeki,  
 Kenji; Takayanagi, Noriyasu; Saito, Tetsu; Hayashi,  
 Eiichi

PATENT ASSIGNEE(S): Toyo Jozo Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 60 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 311378	A2	19890412	EP 1988-309284	19881005
EP 311378	A3	19891213		
EP 311378	B1	19940427		
R: CH, DE, ES, FR, GB, IT, LI				
JP 02076860	A	19900316	JP 1988-210346	19880824
US 4870175	A	19890926	US 1988-253546	19881005
ES 2063050	T3	19950101	ES 1988-309284	19881005
PRIORITY APPLN. INFO.:			JP 1987-251264	A 19871005
			JP 1988-210346	A 19880824
OTHER SOURCE(S):			CASREACT 111:232856; MARPAT 111:232856	
GI				



AB The title compds. [I; Z = N, NH; R<sup>1</sup> = H, alkyl, (substituted) Ph; A = alkylene; R = CO<sub>2</sub>H, alkoxycarbonyl, CONR<sup>2</sup>R<sup>3</sup>, 1-cycloalkyltetrazol-5-yl; R<sup>2</sup> = alkyl, hydroxyalkyl, (substituted)phenylalkyl; R<sup>3</sup> = alkyl, cycloalkyl; R<sup>2</sup>R<sup>3</sup> = (CH<sub>2</sub>)<sub>2</sub>CHR<sup>5</sup>(CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>2</sub>NR<sup>5</sup>(CH<sub>2</sub>)<sub>2</sub>; R<sup>5</sup> = H, (substituted) Ph], useful for treating thrombosis or a circulatory condition, are prepared by, e.g., reduction of anilino-carboxylate II (R<sup>6</sup> = NO<sub>2</sub>; R<sup>7</sup> = alkyl) to II (R<sup>6</sup> = NH<sub>2</sub>), followed by cyclization. Treatment of II (R<sup>6</sup> = NO<sub>2</sub>; R<sup>7</sup> = Et) with NaOMe/MeOH followed by treatment with Br(CH<sub>2</sub>)<sub>3</sub>CO<sub>2</sub>Et in DMF gave 86% II [R<sup>6</sup> = (CH<sub>2</sub>)<sub>3</sub>CO<sub>2</sub>Et] which was refluxed in EtOH with Fe powder and HCl to afford 70% I [Z = NH; R<sup>1</sup> = H; R<sup>6</sup> = (CH<sub>2</sub>)<sub>3</sub>CO<sub>2</sub>Et]. The latter at 100 µg/mL showed 71.3% inhibition of cAMP/phosphodiesterase.

IT 123224-71-5P 123224-72-6P 123224-73-7P  
 123224-74-8P 123224-75-9P 123224-76-0P  
 123224-77-1P 123224-78-2P 123224-79-3P  
 123224-81-7P 123224-82-8P 123224-83-9P  
 123224-84-0P 123224-85-1P 123224-86-2P  
 123224-87-3P 123224-88-4P 123224-89-5P  
 123224-90-8P 123224-91-9P 123224-92-0P  
 123224-93-1P 123224-94-2P 123224-95-3P  
 123224-96-4P 123224-97-5P 123224-98-6P  
 123224-99-7P 123225-05-8P 123225-06-9P  
 123225-07-0P 123225-08-1P 123225-09-2P  
 123225-10-5P 123225-11-6P 123225-12-7P  
 123225-13-8P 123225-16-1P 123225-17-2P  
 123225-18-3P 123225-19-4P 123225-20-7P  
 123225-21-8P 123225-22-9P 123225-23-0P  
 123247-20-1P 123247-21-2P 123247-22-3P

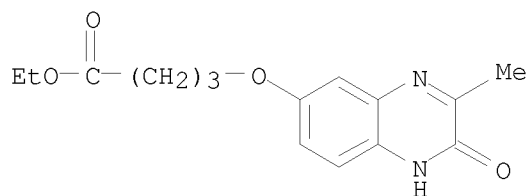
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as cAMP phosphodiesterase and blood platelet aggregation

inhibitor)

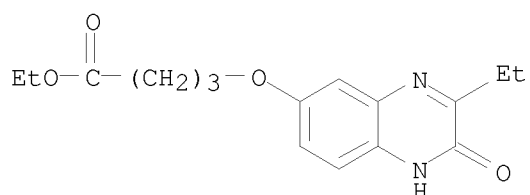
RN 123224-71-5 CAPLUS

CN Butanoic acid, 4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-, ethyl ester (CA INDEX NAME)



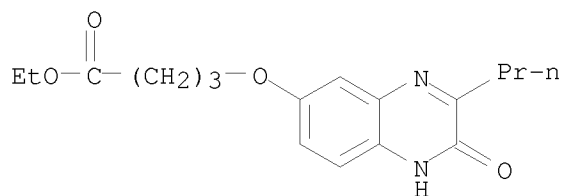
RN 123224-72-6 CAPLUS

CN Butanoic acid, 4-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-, ethyl ester (CA INDEX NAME)



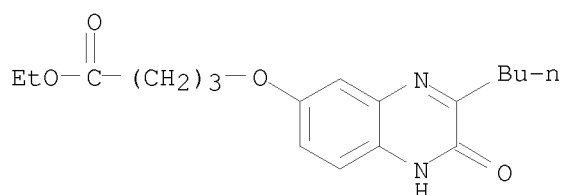
RN 123224-73-7 CAPLUS

CN Butanoic acid, 4-[(1,2-dihydro-2-oxo-3-propyl-6-quinoxalinyloxy)-, ethyl ester (CA INDEX NAME)



RN 123224-74-8 CAPLUS

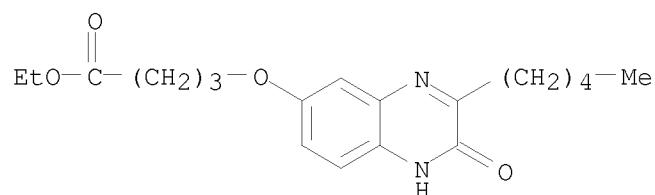
CN Butanoic acid, 4-[(3-butyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-, ethyl ester (CA INDEX NAME)



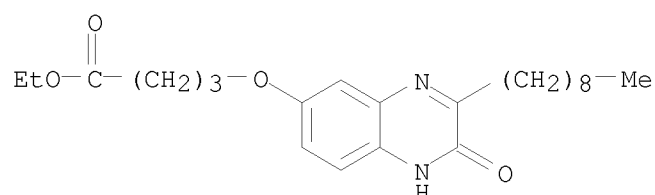
RN 123224-75-9 CAPLUS

CN Butanoic acid, 4-[(1,2-dihydro-2-oxo-3-pentyl-6-quinoxalinyloxy)-, ethyl ester (CA INDEX NAME)

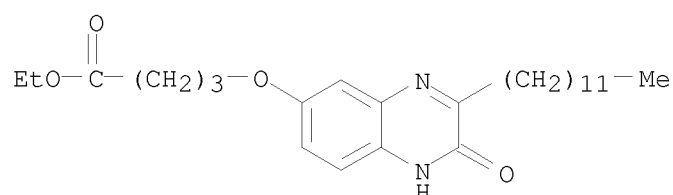




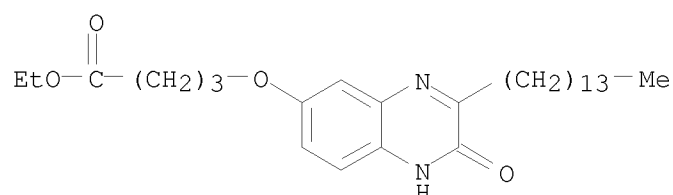
RN 123224-76-0 CAPLUS  
 CN Butanoic acid, 4-[(1,2-dihydro-3-nonyl-2-oxo-6-quinoxalinyloxy)-, ethyl ester (CA INDEX NAME)



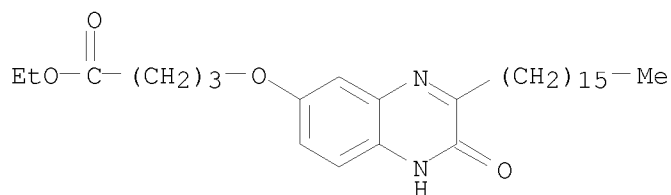
RN 123224-77-1 CAPLUS  
 CN Butanoic acid, 4-[(3-dodecyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-, ethyl ester (CA INDEX NAME)



RN 123224-78-2 CAPLUS  
 CN Butanoic acid, 4-[(1,2-dihydro-2-oxo-3-tetradecyl-6-quinoxalinyloxy)-, ethyl ester (CA INDEX NAME)

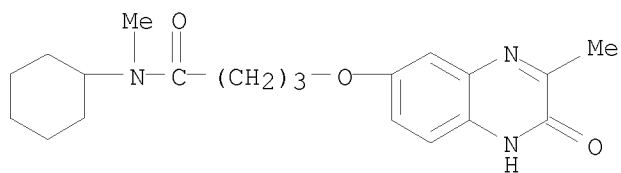


RN 123224-79-3 CAPLUS  
 CN Butanoic acid, 4-[(3-hexadecyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-, ethyl ester (CA INDEX NAME)



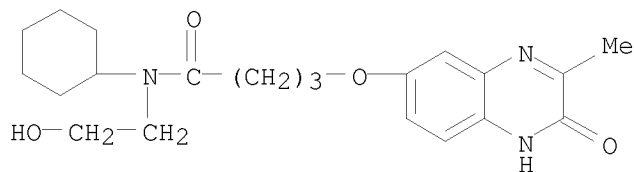
RN 123224-81-7 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-N-methyl- (CA INDEX NAME)



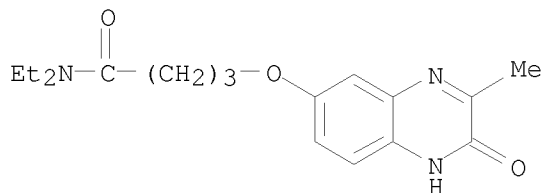
RN 123224-82-8 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-N-(2-hydroxyethyl)- (CA INDEX NAME)



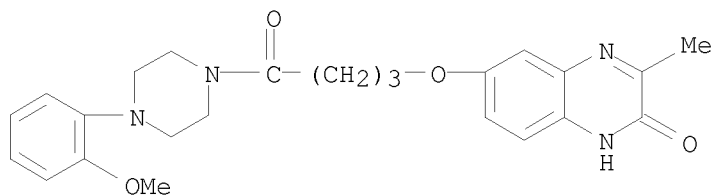
RN 123224-83-9 CAPLUS

CN Butanamide, 4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-N,N-diethyl- (CA INDEX NAME)



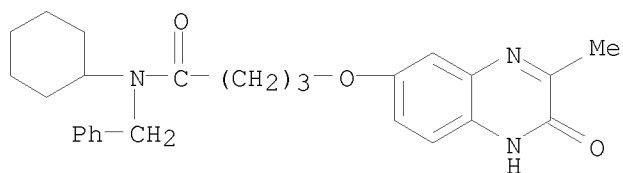
RN 123224-84-0 CAPLUS

CN Piperazine, 1-[4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-1-oxobutyl]-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



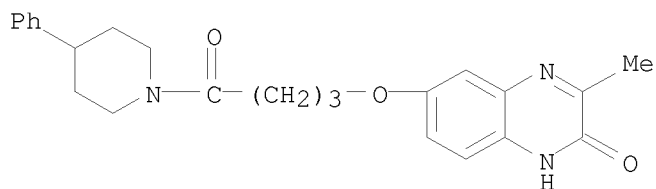
RN 123224-85-1 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy]-N-(phenylmethyl)- (CA INDEX NAME)



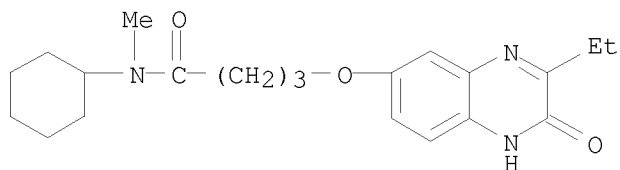
RN 123224-86-2 CAPLUS

CN Piperidine, 1-[4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy]-1-oxobutyl]-4-phenyl- (9CI) (CA INDEX NAME)



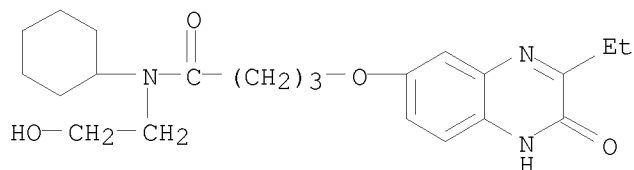
RN 123224-87-3 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]-N-methyl- (CA INDEX NAME)

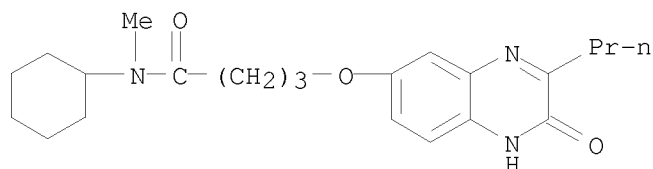


RN 123224-88-4 CAPLUS

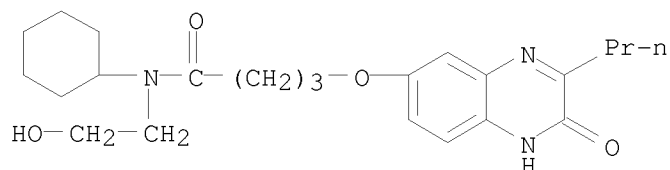
CN Butanamide, N-cyclohexyl-4-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]-N-(2-hydroxyethyl)- (CA INDEX NAME)



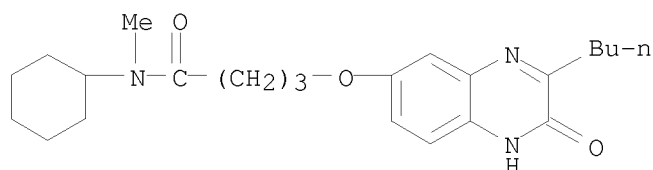
RN 123224-89-5 CAPLUS  
 CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-2-oxo-3-propyl-6-quinoxalinyloxy)-N-methyl- (CA INDEX NAME)



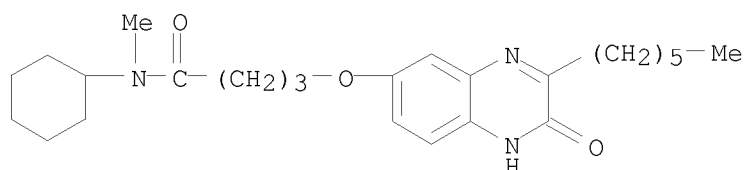
RN 123224-90-8 CAPLUS  
 CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-2-oxo-3-propyl-6-quinoxalinyloxy)-N-(2-hydroxyethyl)- (CA INDEX NAME)



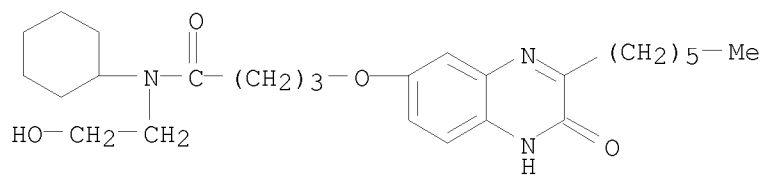
RN 123224-91-9 CAPLUS  
 CN Butanamide, 4-[(3-butyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-cyclohexyl-N-methyl- (CA INDEX NAME)



RN 123224-92-0 CAPLUS  
 CN Butanamide, N-cyclohexyl-4-[(3-hexyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-methyl- (CA INDEX NAME)

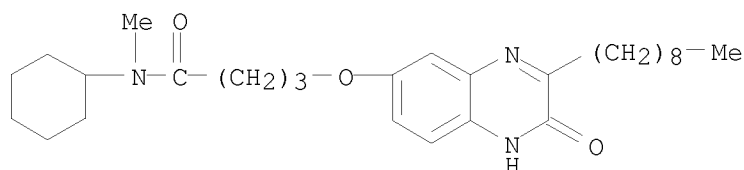


RN 123224-93-1 CAPLUS  
 CN Butanamide, N-cyclohexyl-4-[(3-hexyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-(2-hydroxyethyl)- (CA INDEX NAME)



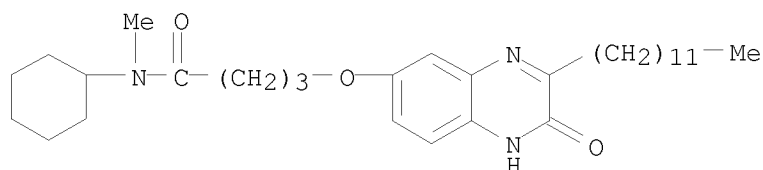
RN 123224-94-2 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-3-nonyl-2-oxo-6-quinoxalinyloxy)-N-methyl- (CA INDEX NAME)]



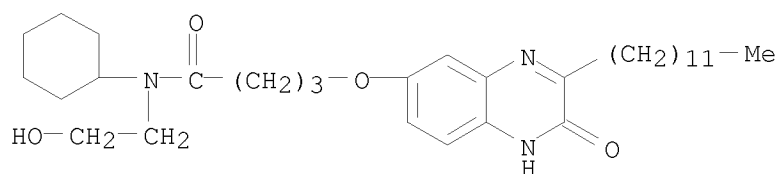
RN 123224-95-3 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(3-dodecyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-methyl- (CA INDEX NAME)]



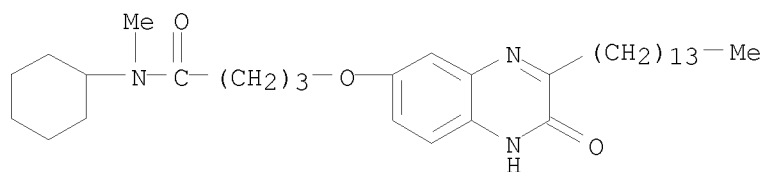
RN 123224-96-4 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(3-dodecyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-(2-hydroxyethyl)- (CA INDEX NAME)]



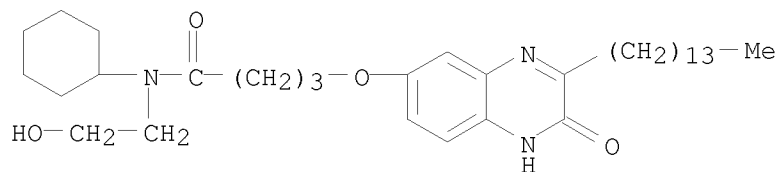
RN 123224-97-5 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-2-oxo-3-tetradecyl-6-quinoxalinyloxy)-N-methyl- (CA INDEX NAME)]



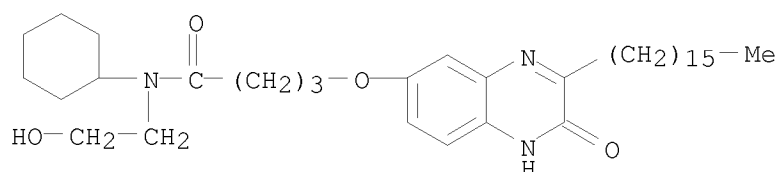
RN 123224-98-6 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-2-oxo-3-tetradecyl-6-quinoxalinyloxy]-N-(2-hydroxyethyl)- (CA INDEX NAME)



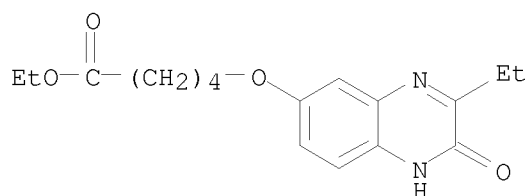
RN 123224-99-7 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(3-hexadecyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]-N-(2-hydroxyethyl)- (CA INDEX NAME)



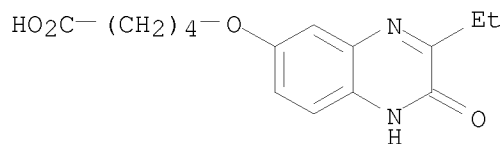
RN 123225-05-8 CAPLUS

CN Pentanoic acid, 5-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]-, ethyl ester (CA INDEX NAME)



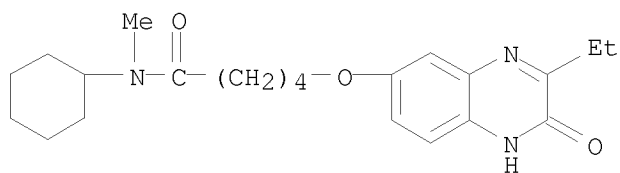
RN 123225-06-9 CAPLUS

CN Pentanoic acid, 5-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]- (CA INDEX NAME)



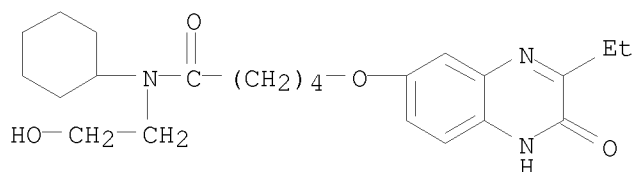
RN 123225-07-0 CAPLUS

CN Pentanamide, N-cyclohexyl-5-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]-N-methyl- (CA INDEX NAME)



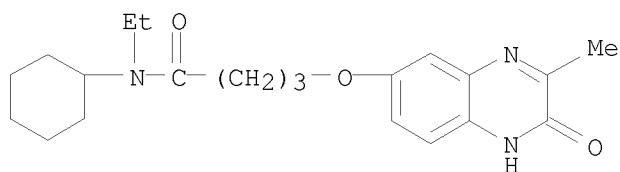
RN 123225-08-1 CAPLUS

CN Pentanamide, N-cyclohexyl-5-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-N-(2-hydroxyethyl)- (CA INDEX NAME)



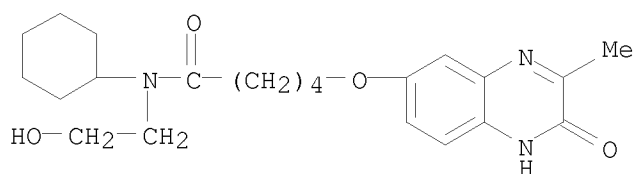
RN 123225-09-2 CAPLUS

CN Butanamide, N-cyclohexyl-4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-N-ethyl- (CA INDEX NAME)



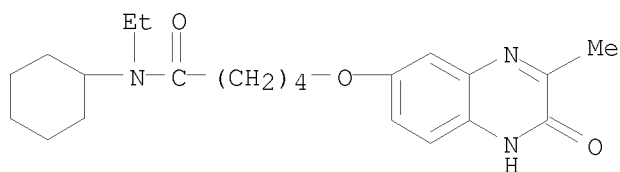
RN 123225-10-5 CAPLUS

CN Pentanamide, N-cyclohexyl-5-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-N-(2-hydroxyethyl)- (CA INDEX NAME)



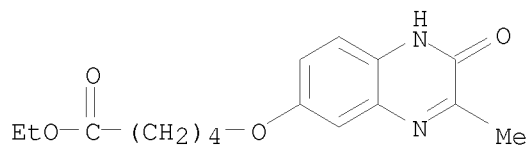
RN 123225-11-6 CAPLUS

CN Pentanamide, N-cyclohexyl-5-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy)-N-ethyl- (CA INDEX NAME)



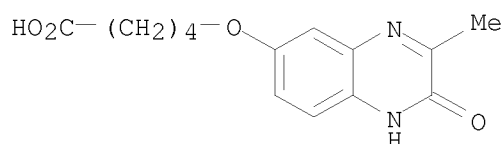
RN 123225-12-7 CAPLUS

CN Pentanoic acid, 5-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy]-, ethyl ester (CA INDEX NAME)



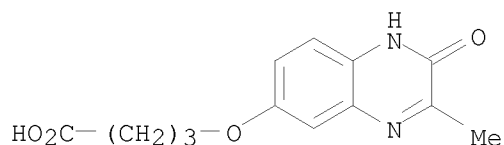
RN 123225-13-8 CAPLUS

CN Pentanoic acid, 5-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy]- (CA INDEX NAME)



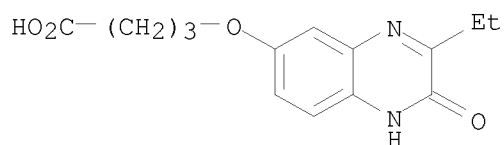
RN 123225-16-1 CAPLUS

CN Butanoic acid, 4-[(1,2-dihydro-3-methyl-2-oxo-6-quinoxalinyloxy]- (CA INDEX NAME)



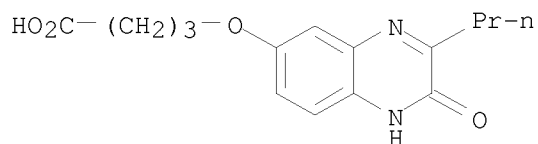
RN 123225-17-2 CAPLUS

CN Butanoic acid, 4-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]- (CA INDEX NAME)



RN 123225-18-3 CAPLUS

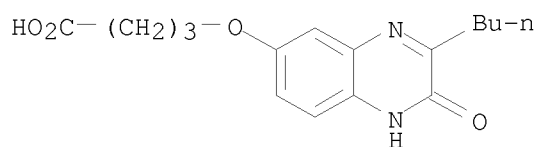
CN Butanoic acid, 4-[(1,2-dihydro-2-oxo-3-propyl-6-quinoxalinyloxy]- (CA INDEX NAME)



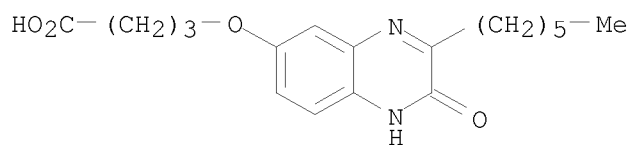
RN 123225-19-4 CAPLUS

CN Butanoic acid, 4-[(3-butyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]- (CA INDEX NAME)

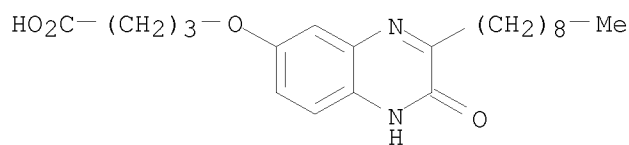




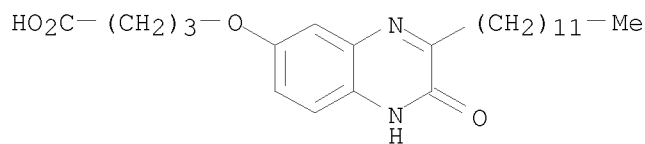
RN 123225-20-7 CAPLUS  
 CN Butanoic acid, 4-[(3-hexyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)- (CA INDEX NAME)]



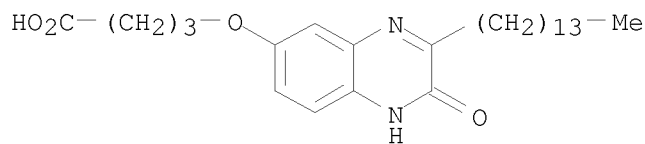
RN 123225-21-8 CAPLUS  
 CN Butanoic acid, 4-[(1,2-dihydro-3-nonyl-2-oxo-6-quinoxalinyloxy)- (CA INDEX NAME)]



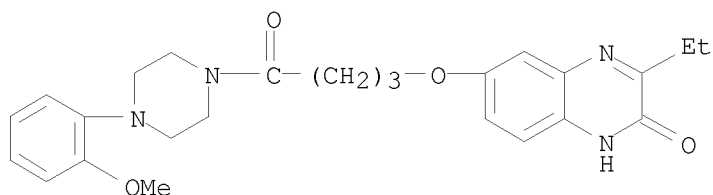
RN 123225-22-9 CAPLUS  
 CN Butanoic acid, 4-[(3-dodecyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)- (CA INDEX NAME)]



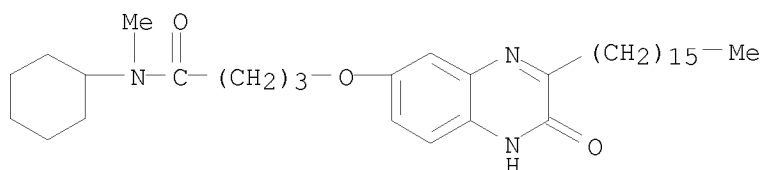
RN 123225-23-0 CAPLUS  
 CN Butanoic acid, 4-[(1,2-dihydro-2-oxo-3-tetradecyl-6-quinoxalinyloxy)- (CA INDEX NAME)]



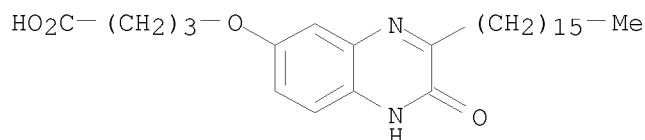
RN 123247-20-1 CAPLUS  
 CN Piperazine, 1-[4-[(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy)-1-oxobutyl]-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)]



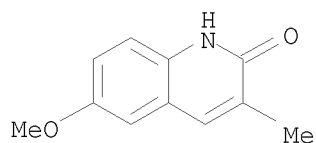
RN 123247-21-2 CAPLUS  
 CN Butanamide, N-cyclohexyl-4-[(3-hexadecyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]-N-methyl- (CA INDEX NAME)



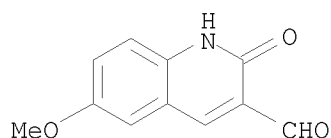
RN 123247-22-3 CAPLUS  
 CN Butanoic acid, 4-[(3-hexadecyl-1,2-dihydro-2-oxo-6-quinoxalinyloxy]- (CA INDEX NAME)



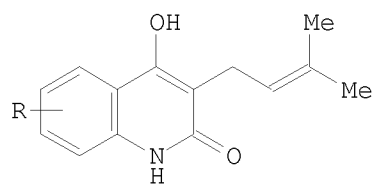
L28 ANSWER 136 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:632207 CAPLUS  
 DOCUMENT NUMBER: 111:232207  
 ORIGINAL REFERENCE NO.: 111:38561a,38564a  
 TITLE: Oxidation of nitromethane by manganese(III) acetate:  
 novel formation of methyl radical  
 AUTHOR(S): Srivastava, Ranjan P.; Seth, M.; Bhaduri, A. P.  
 CORPORATE SOURCE: Div. Med. Chem., Cent. Drug Res. Inst., Lucknow, 226  
 001, India  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1989),  
 28B(1), 65-6  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 111:232207  
 AB The reaction of benzene with nitromethane in the presence of  
 manganese(III) acetate and acetic acid is shown to give toluene via the  
 formation of a Me radical. Formation of the di-Me ether of hydroquinone  
 in the reaction of hydroquinone with nitromethane under identical reaction  
 conditions provides chemical evidence for the formation of Me radical.  
 IT 123990-77-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and O-methylation of)  
 RN 123990-77-2 CAPLUS  
 CN 2(1H)-Quinolinone, 6-methoxy-3-methyl- (CA INDEX NAME)



IT 123990-78-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 123990-78-3 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



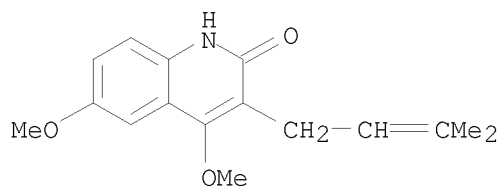
L28 ANSWER 137 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:595191 CAPLUS  
 DOCUMENT NUMBER: 111:195191  
 ORIGINAL REFERENCE NO.: 111:32459a,32462a  
 TITLE: A convenient approach to the synthesis of prenyl-,  
 furo- and pyranoquinoline alkaloids of the Rutaceae  
 AUTHOR(S): Shobana, N.; Yeshoda, P.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046,  
 India  
 SOURCE: Tetrahedron (1989), 45(3), 757-62  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 111:195191  
 GI



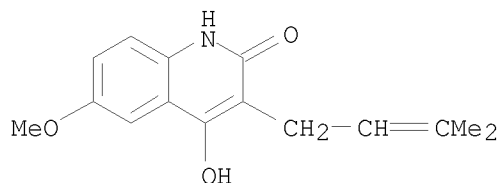
I

AB A convenient method for the synthesis of 4-hydroxy-3-prenyl-2-quinolones I  
 (R = H, 6-, 7-, 8-MeO) which have been recognized as precursors to  
 prenyl-, furo- and pyranoquinoline alkaloids of the Rutaceae is described.  
 The methodol. involves C,C-diprenylation of 2,4-dihydroxyquinoline  
 followed by partial deallylation using sodium hydrogen telluride reagent.  
 IT 123348-67-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 123348-67-4 CAPLUS  
 CN 2(1H)-Quinolinone, 4,6-dimethoxy-3-(3-methyl-2-butenyl)- (9CI) (CA INDEX

NAME)



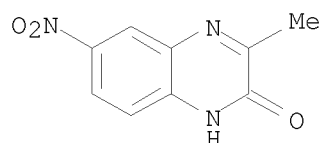
IT 56470-53-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation, methylation, and intramol. cyclization of)  
RN 56470-53-2 CAPLUS  
CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-(3-methyl-2-butenyl)- (9CI) (CA  
INDEX NAME)



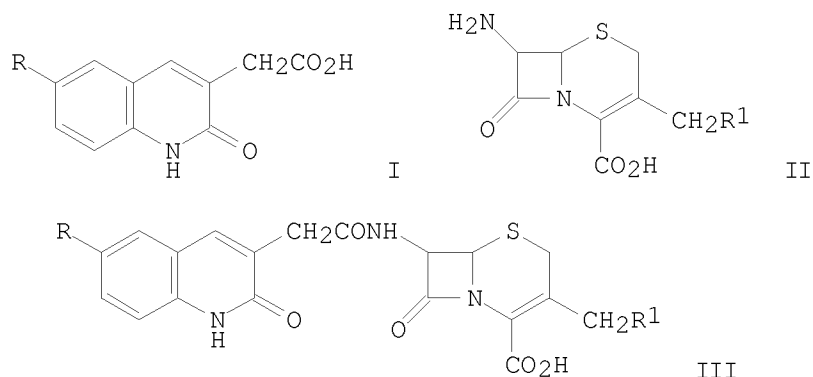
L28 ANSWER 138 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1989:432635 CAPLUS  
DOCUMENT NUMBER: 111:32635  
ORIGINAL REFERENCE NO.: 111:5449a,5452a  
TITLE: 1,4,5,8-Tetraazaphenanthrene complexes of copper(I)  
and silver(I)  
AUTHOR(S): Nasielski, J.; Nasielski-Hinkens, R.; Heilporn, S.;  
Rypens, C.; Declercq, J. P.  
CORPORATE SOURCE: Fac. Sci., Univ. Libre Bruxelles, Brussels, 1050,  
Belg.  
SOURCE: Bulletin des Societes Chimiques Belges (1988),  
97(11-12), 983-92  
CODEN: BSCBAG; ISSN: 0037-9646  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB AgL2NO3 (L = 1,4,5,8-tetraazaphenanthrene (TAP), 2,3,6,7-  
tetramethyl-1,4,5,8-tetraazaphenanthrene (tmTAP)), Cu(L1)2ClO4 (L1 =  
3,6-dimethyl-1,4,5,8-tetraazaphenanthrene (dmTAP), tmTAP)), TAP, dmTAP and  
tmTAP were prepared and characterized. Their 1H NMR spectra are discussed.  
The structure of Ag(TAP)2(NO3), as determined by x-ray crystallog. [monoclinic  
space group Cc, a 16.484(5), b 7.725(2), c 17.100(2) Å, β  
16.67(2)°, Z = 4; refinement of 1679 reflections with I >  
2.5σ(I) gave R = 0.028] is that of a strongly folded and twisted  
square planar arrangement of the chelating ligands around the Ag atom; the  
4 Ag-N bonds are not equal: they are shorter (2.36 Å) in 1 pair of  
trans bonds than in the other (2.56 Å). DmTAP was prepared starting  
from 2-hydroxy-3-methylquinoxaline which was nitrated, then treated with  
POCl3, the resulting 2-chloro-3-methyl-6-nitroquinoxaline reacted with  
N2H4 and the hydrazino group oxidized to give 3-methyl-6-nitroquinoxaline.  
This was aminated with hydroxylamine, reduced to the diamine and finally  
condensed with glyoxal to give 2,6-dimethyl- and 3,6-dimethyl-1,4,5,8-

tetraazaphenanthrene.

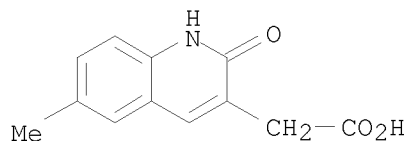
IT 19801-10-6P, 2-Hydroxy-3-methyl-6-nitroquinoxaline  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and chlorination of)  
RN 19801-10-6 CAPLUS  
CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)



L28 ANSWER 139 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1989:423255 CAPLUS  
DOCUMENT NUMBER: 111:23255  
ORIGINAL REFERENCE NO.: 111:4041a, 4044a  
TITLE: Application of N,N'-carbonyldiimidazole to the  
synthesis of cephalosporins  
AUTHOR(S): Chen, Qingping; Duan, Tinghan; Zhou, Huishu  
CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, Peop.  
Rep. China  
SOURCE: Zhongguo Yaoke Daxue Xuebao (1988), 19(3), 192-6  
CODEN: ZHYXE9; ISSN: 1000-5048  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
GI

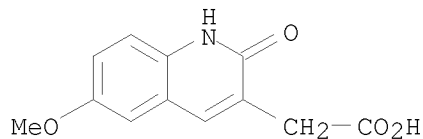


AB Stirring quinolinoneacetic acids I (R = H, Cl, Me, MeO) with  
aminocephemcarboxylic acids II (R1 = OAc, H, 2-methyl-1,3,4-thiadiazol-5-  
ylthio, 1-methyl-1,2,3,4-tetrazol-5-ylthio), Et3N, and  
N,N'-carbonyldiimidazole in Me2SO-CHCl3 for 24 h gave 18-40% amides III.  
IT 61020-52-8 64124-71-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with aminocephemcarboxylate, in presence of  
N,N'-carbonyldiimidazole)  
RN 61020-52-8 CAPLUS  
CN 3-Quinolineacetic acid, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



RN 64124-71-6 CAPLUS

CN 3-Quinolineacetic acid, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



IT 121087-47-6P 121087-48-7P 121087-49-8P

121087-50-1P 121087-51-2P 121087-52-3P

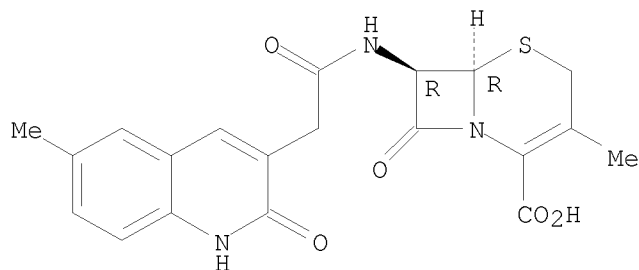
121087-53-4P 121099-48-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 121087-47-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-  
, (6R-trans)- (9CI) (CA INDEX NAME)

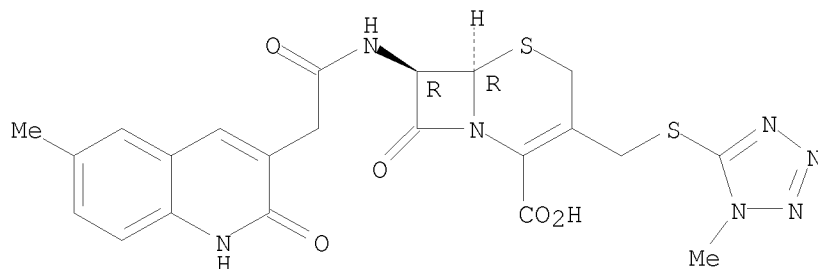
Absolute stereochemistry.



RN 121087-48-7 CAPLUS

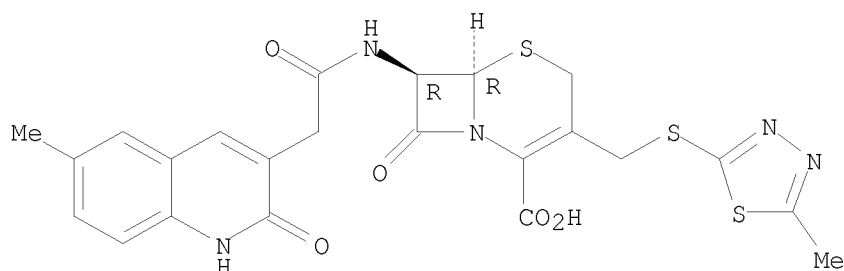
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-  
1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



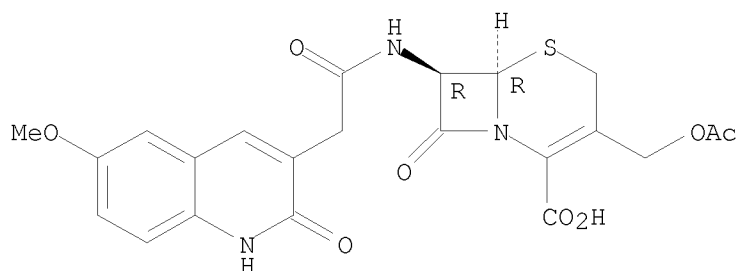
RN 121087-49-8 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



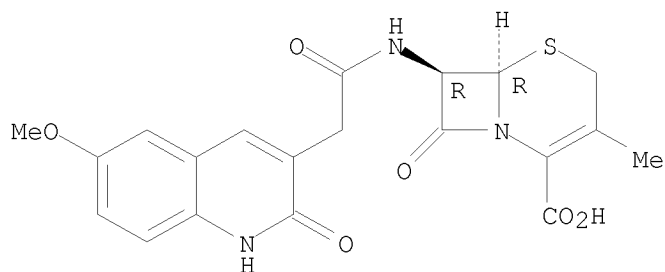
RN 121087-50-1 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



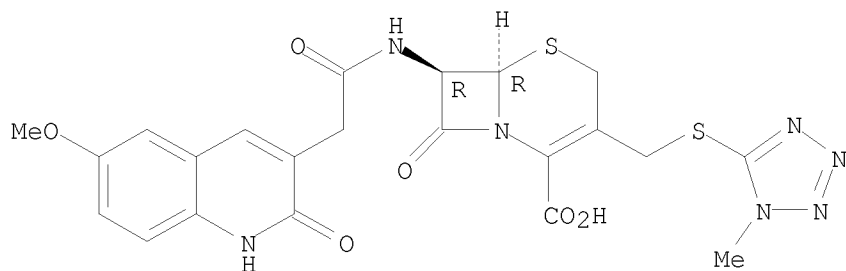
RN 121087-51-2 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-methyl-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



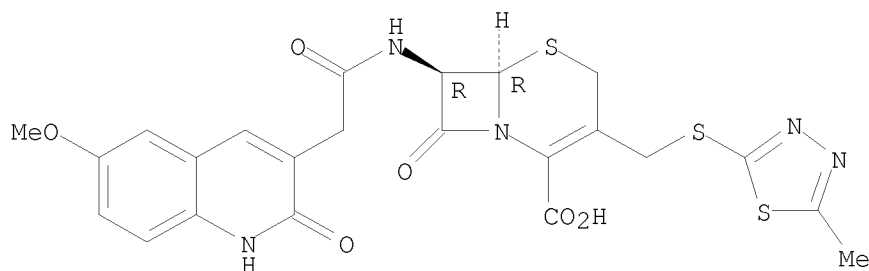
RN 121087-52-3 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



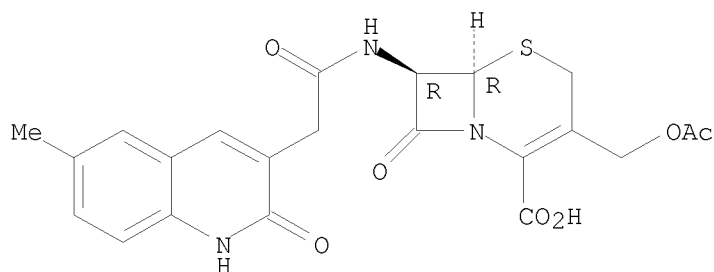
RN 121087-53-4 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)acetyl]amino]-3-[[[(5-methyl-  
1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.



RN 121099-48-7 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-6-methyl-2-oxo-3-  
quinolinyl)acetyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

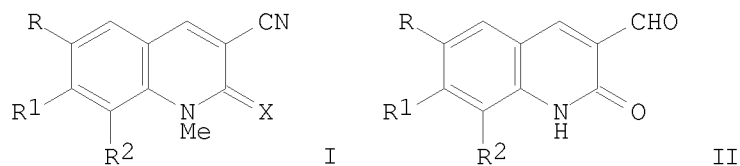
Absolute stereochemistry.



L28 ANSWER 140 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1989:75274 CAPLUS  
DOCUMENT NUMBER: 110:75274  
ORIGINAL REFERENCE NO.: 110:12433a,12436a  
TITLE: Synthesis of 1-methyl-2-oxo-1,2-dihydro-3-  
quinolinecarbonitriles  
AUTHOR(S): Raj, T. Tilak; Ambekar, Sarvottam Y.



CORPORATE SOURCE: Dep. Chem., Univ. Mysore, Mysore, India  
 SOURCE: Journal fuer Praktische Chemie (Leipzig) (1988),  
 330(2), 293-8  
 CODEN: JPCEAO; ISSN: 0021-8383  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 110:75274  
 GI

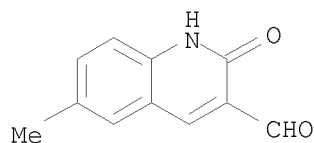


AB Six title compds. I (R, R1 = H, Me; R1 = H, Me, MeO, Cl, X = O) were prepared from quinolinecarboxaldehydes II by methylation followed by oximation with HONH2 and dehydration. I (X = O) were treated with P2S5 to give I (X = S).

IT 101382-53-0  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (methylation of)

RN 101382-53-0 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



L28 ANSWER 141 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:589594 CAPLUS

DOCUMENT NUMBER: 109:189594

ORIGINAL REFERENCE NO.: 109:31367a,31370a

TITLE: Kinetic study on the annelation of heterocycles. 1. Quinoxalinone derivatives synthesized by the Hinsberg reaction

AUTHOR(S): Abasolo, Maria I.; Gaozza, Carlos H.; Fernandez, Beatriz M.

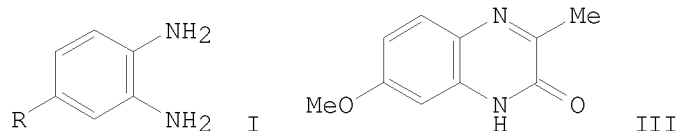
CORPORATE SOURCE: Fac. Pharm. Biochem., Univ. Buenos Aries, Buenos Aires, Argent.

SOURCE: Journal of Heterocyclic Chemistry (1987), 24(6), 1771-5  
 CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 109:189594  
 GI



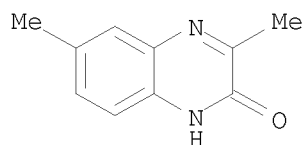
AB Rate consts. were obtained for the Hinsberg cyclocondensation of o-phenylenediamines (I; R = H, MeO, Me) with MeCOCO<sub>2</sub>R<sub>1</sub> (II; R<sub>1</sub> = H, Et) to give quinoxalinones. The reaction of I (R = H) was improved by using H<sub>2</sub>SO<sub>4</sub>-H<sub>2</sub>O mixts. The reaction of I (R = MeO) gave III regioselectively, but that of I (R = Me) gave an isomer mixture I (R = NO<sub>2</sub>, NH<sub>2</sub>) did not give quinoxalinones. Reactions with II (R<sub>1</sub> = H) were 100-1000 times faster than those with II (R<sub>1</sub> = Et). Mechanisms were proposed.

IT 28082-84-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 28082-84-0 CAPLUS

CN 2(1H)-Quinoxalinone, 3,6-dimethyl- (CA INDEX NAME)



L28 ANSWER 142 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:493385 CAPLUS

DOCUMENT NUMBER: 109:93385

ORIGINAL REFERENCE NO.: 109:15597a,15600a

TITLE: A new synthesis of dictamine, evolitrine and 6-methyldictamnine

AUTHOR(S): Rajamanickam, P.; Shanmugam, P.

CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046, India

SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1987), 26B(10), 910-13

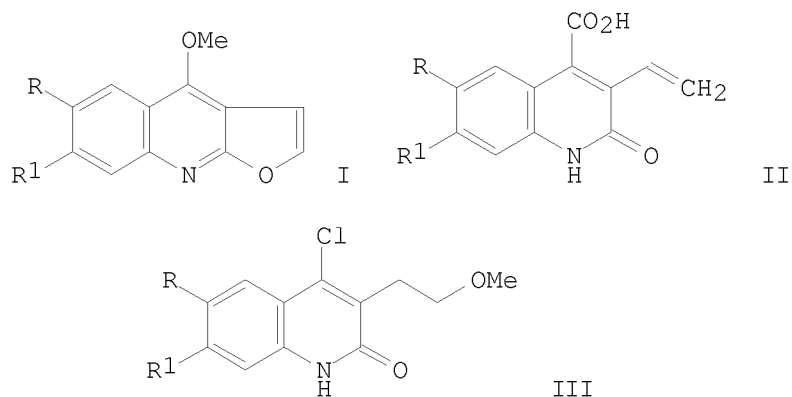
CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 109:93385

GI

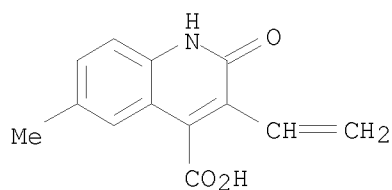


AB Dictamnine (I R = R1 = H), evolitrine (I, R = H, R1 = MeO), and 6-methyldictamnine (I; R = Me, R1 = H) were prepared starting from 4-carboxy-3-vinyl-2-quinolones II via cyclization of (methoxyethyl)quinolones III.

IT 101560-89-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (amidation of)

RN 101560-89-8 CAPLUS

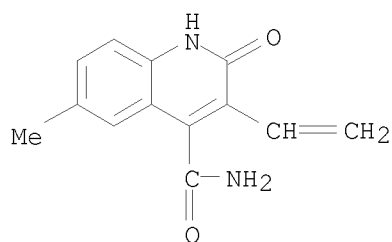
CN 4-Quinolinecarboxylic acid, 3-ethenyl-1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



IT 115881-28-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and chlorination of)

RN 115881-28-2 CAPLUS

CN 4-Quinolinecarboxamide, 3-ethenyl-1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)

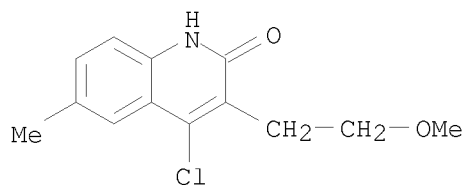


IT 115881-43-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and intramol. cyclization of)

RN 115881-43-1 CAPLUS

CN 2(1H)-Quinolinone, 4-chloro-3-(2-methoxyethyl)-6-methyl- (CA INDEX NAME)



L28 ANSWER 143 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:437756 CAPLUS

DOCUMENT NUMBER: 109:37756

ORIGINAL REFERENCE NO.: 109:6391a,6394a

TITLE: Pyrroloquinolines. Part IV. Synthesis of 1-aryl-1H-pyrrolo[2,3-b]quinolines

AUTHOR(S): Sivakamasundari, S.; Kumaraswami, K.; Shanmugam, P.; Vellingiri, R.; Alagaraswamy, C.

CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046, India

SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1987), 26B(8), 744-7

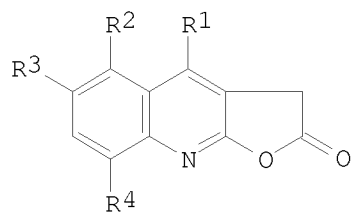
CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal

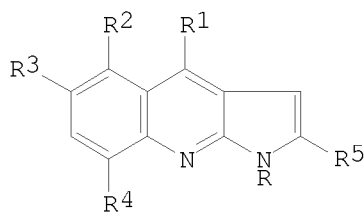
LANGUAGE: English

OTHER SOURCE(S): CASREACT 109:37756

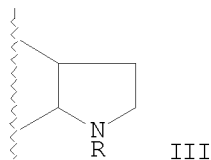
GI



I



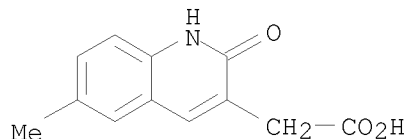
II



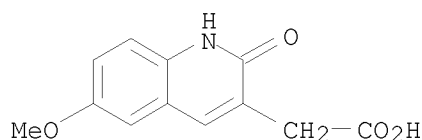
III

AB Condensation of anilines RNH<sub>2</sub> [R = Ph, 4- or 2-MeC<sub>6</sub>H<sub>4</sub>, 4-MeOC<sub>6</sub>H<sub>4</sub>, 2,5-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, 4- or 2-ClC<sub>6</sub>H<sub>4</sub>, 4-BrC<sub>6</sub>H<sub>4</sub>] with 2-quinolone-3-acetic acid lactones I (R<sup>1</sup> = H, Me, Ph, substituted phenyl, R<sup>2</sup> = H, OMe, R<sup>3</sup> = H, Me, OMe, Cl, R<sup>4</sup> = H, Me, OMe) gave the corresponding 2-quinolone-3-acetanilides in 70-91% yields. Cyclization with POCl<sub>3</sub> gave 1-aryl-2-chloropyrrolo[2,3-b]quinolines II (R<sup>5</sup> = Cl) in 49-72% yields. Hydrogenolysis in the presence of 5 or 10% Pd/C gave the corresponding pyrroloquinolines II (R<sup>5</sup> = H), dihydropyrroloquinolines III, or a mixture of both.

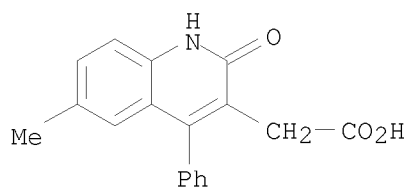
IT 61020-52-8 64124-71-6 65418-08-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclization of, with acetic anhydride)  
 RN 61020-52-8 CAPLUS  
 CN 3-Quinolineacetic acid, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



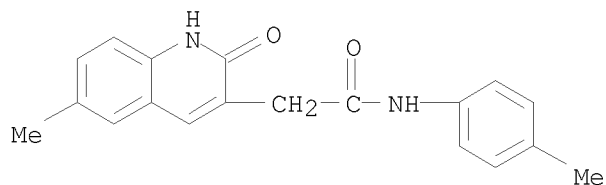
RN 64124-71-6 CAPLUS  
 CN 3-Quinolineacetic acid, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



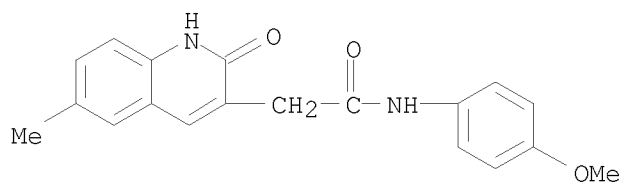
RN 65418-08-8 CAPLUS  
 CN 3-Quinolineacetic acid, 1,2-dihydro-6-methyl-2-oxo-4-phenyl- (CA INDEX NAME)



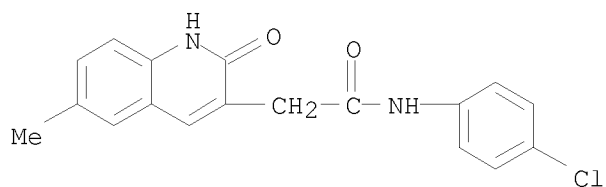
IT 61020-57-3P 115107-59-0P 115107-60-3P  
 115107-61-4P 115107-62-5P 115107-67-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and cyclization of, with phosphorus oxychloride)  
 RN 61020-57-3 CAPLUS  
 CN 3-Quinolineacetamide, 1,2-dihydro-6-methyl-N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



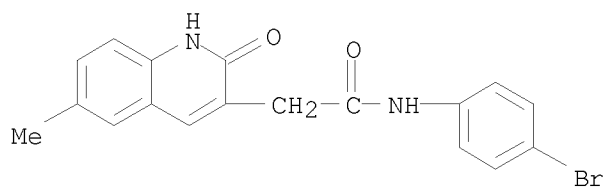
RN 115107-59-0 CAPLUS  
 CN 3-Quinolineacetamide, 1,2-dihydro-N-(4-methoxyphenyl)-6-methyl-2-oxo- (CA INDEX NAME)



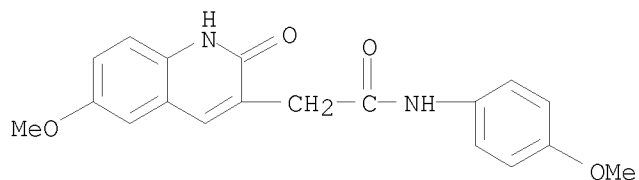
RN 115107-60-3 CAPLUS  
 CN 3-Quinolineacetamide, N-(4-chlorophenyl)-1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



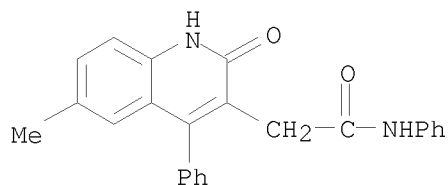
RN 115107-61-4 CAPLUS  
 CN 3-Quinolineacetamide, N-(4-bromophenyl)-1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



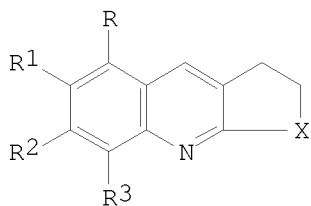
RN 115107-62-5 CAPLUS  
 CN 3-Quinolineacetamide, 1,2-dihydro-6-methoxy-N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



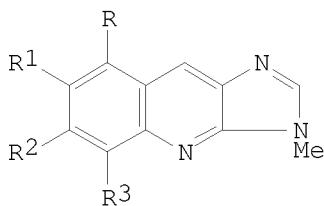
RN 115107-67-0 CAPLUS  
 CN 3-Quinolineacetamide, 1,2-dihydro-6-methyl-2-oxo-N,4-diphenyl- (CA INDEX NAME)



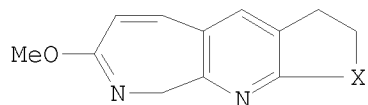
L28 ANSWER 144 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1988:422893 CAPLUS  
 DOCUMENT NUMBER: 109:22893  
 ORIGINAL REFERENCE NO.: 109:3913a,3916a  
 TITLE: The synthesis of furo-, thieno-, and pyrazolopyrido[2,3-c]azepines and -pyrido[3,2-c]azepines by photolysis of 5-, 6-, 7-, and 8-azido derivatives of furo[2,3-b]-, thieno[2,3-b]-, and pyrazolo[3,4-b]quinolines  
 AUTHOR(S): Hayes, Roy; Smalley, Robert K.  
 CORPORATE SOURCE: Dep. Chem. Appl. Chem., Univ. Salford, Salford, M5 4WT, UK  
 SOURCE: Journal of Chemical Research, Synopses (1988), (1), 14-15  
 CODEN: JRPSDC; ISSN: 0308-2342  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 109:22893  
 GI



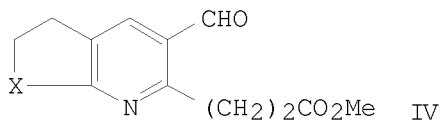
I



II

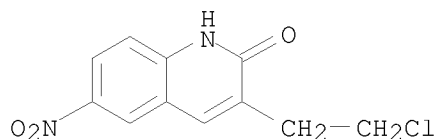


III



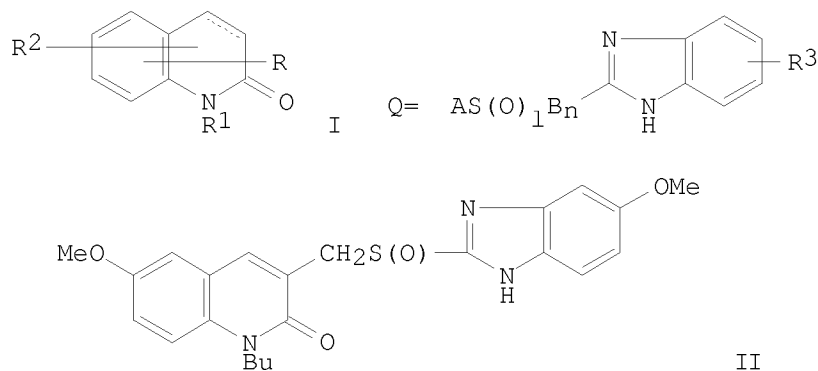
IV

AB Photochem ring expansion of furo- and thieno[2,3-b]quinolines I (X = O, S; R = R1 = R3 = H, R2 = N3; R = R1 = H, R2 = Me, R3 = N3; R = N3, R1 = Me, R2 = R3 = H) and of pyrazolo[3,4-b]quinolines II (R - R3 same) in MeOK-MeOH-dioxane gave the title pyrido[2,3-c]azepines, e.g. III (X = S, O). Similar photolysis of I (X = O, S; R = R2 = R3 = H, R1 = N3) gave ring-opened products IV.  
 IT 115073-30-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and furo- and thienquinoline formation of)  
 RN 115073-30-8 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(2-chloroethyl)-6-nitro- (CA INDEX NAME)



L28 ANSWER 145 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1988:221701 CAPLUS  
 DOCUMENT NUMBER: 108:221701  
 ORIGINAL REFERENCE NO.: 108:36399a,36402a  
 TITLE: Preparation of [[(2-benzimidazolylalkyl)thio]alkyl]carbostyryl derivatives as antiulcer agents  
 INVENTOR(S): Uchida, Minoru; Morita, Seiji; Chihiro, Masatoshi  
 PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62240677	A	19871021	JP 1986-61819	19860318
PRIORITY APPLN. INFO.: GI			JP 1985-290994	A1 19851223



AB The title compds. [I; R = 3-, 4-, 5-, 6-, 7, or 8-Q; R1 = H, (un)substituted lower alkyl, lower alkenyl, lower alkynyl; R2 = H, lower alkoxy, lower alkyl; R3 = H, lower alkoxy, lower (halo)alkyl, halo, lower alkanoyl; A, B = lower alkylene; n, l = 0, 1] and their salts, useful as antiulcer agents, were prepared A mixture of 2.0 5-methoxy-2-mercapto-1H-benzimidazole, 1.9 3-(chloromethyl)carbostyryl and 1.7 g K2CO3 in DMF was stirred at 60-70° for 7 h to give 1.0 g 3-[[5-methoxy-1H-benzimidazol-2-yl)thio]methyl]carbostyryl. I in vitro inhibited H+ + K+ATPase prepared from hog stomach with IC50's of 2.2 + 10-7 - 8.7 + 10-6M. Tablets containing a carbostyryl derivative II 150 mg, avicel 40, corn starch 30, Mg stearate 2, hydroxypropylmethylcellulose 10, polyethylene glycol 2, hydroxypropylmethylcellulose 10, polyethylene glycol 3, castor oil 40 and ethanol 40 g were prepared

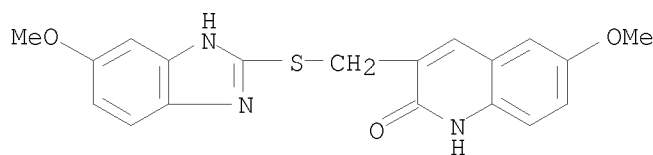
IT 114560-62-2P 114560-88-2P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological



study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, as antiulcer agent)

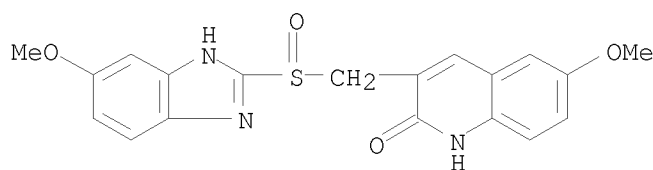
RN 114560-62-2 CAPLUS

CN 2(1H)-Quinolinone, 6-methoxy-3-[[5-methoxy-1H-benzimidazol-2-yl)thio]methyl]- (9CI) (CA INDEX NAME)



RN 114560-88-2 CAPLUS

CN 2(1H)-Quinolinone, 6-methoxy-3-[[5-methoxy-1H-benzimidazol-2-yl)sulfinyl]methyl]- (9CI) (CA INDEX NAME)



L28 ANSWER 146 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:75246 CAPLUS

DOCUMENT NUMBER: 108:75246

ORIGINAL REFERENCE NO.: 108:12443a,12446a

TITLE: Synthesis and spectral studies of 3-substituted-2H-pyrano[2,3-b]quinolin-2-ones

AUTHOR(S): Tilakraj, T.; Ambekar, Sarvottam Y.

CORPORATE SOURCE: Dep. Post-Grad. Stud. Res. Chem., Univ. Mysore, Mysore, 570 006, India

SOURCE: Journal of the Indian Chemical Society (1986), 63(11), 981-3

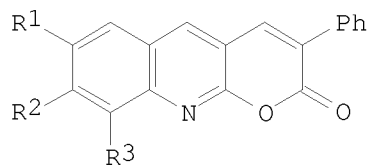
CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

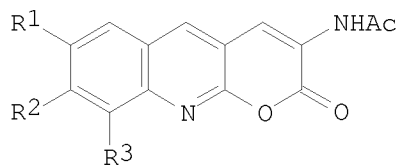
LANGUAGE: English

OTHER SOURCE(S): CASREACT 108:75246

GI



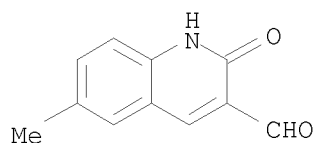
I



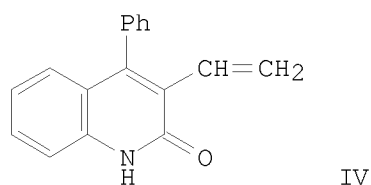
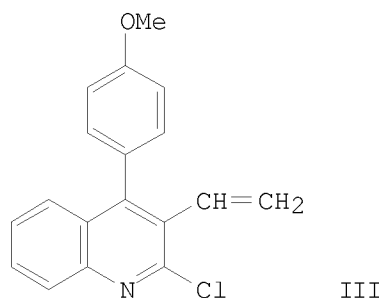
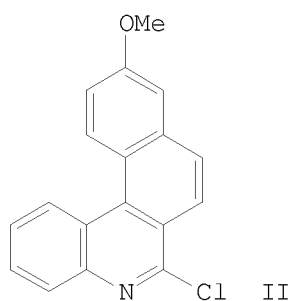
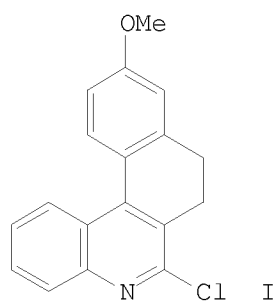
II

AB 3-Formyl-2(1H)-quinolinones underwent a cyclocondensation reaction with PhCH2CO2Na and Ac2O to give phenylpyranoquinolines I (R1 = H, OMe, Me; R2 = H, OMe, Me, Cl; R3 = H, OMe, Me). Acetamido-substituted compds. II (R1 = H, OMe, Me; R2 = H, OMe, Me, Cl; R3 = H, OMe) were prepared from

formylquinolinones and AcNHCH<sub>2</sub>CO<sub>2</sub>H in a mixture of Ac<sub>2</sub>O and Et<sub>3</sub>N.  
 IT 101382-53-0  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclocondensation reaction of, with sodium phenylacetate glycine  
 derivative)  
 RN 101382-53-0 CAPLUS  
 CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



L28 ANSWER 147 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1987:636488 CAPLUS  
 DOCUMENT NUMBER: 107:236488  
 ORIGINAL REFERENCE NO.: 107:37985a, 37988a  
 TITLE: Benzophenanthridines. Part V. Photocyclization of  
 4-phenyl-3-vinylquinolines. Convenient synthesis of  
 benzo[k]phenanthridines  
 AUTHOR(S): Veeramani, K.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046,  
 India  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1987),  
 26B(2), 116-21  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 107:236488  
 GI

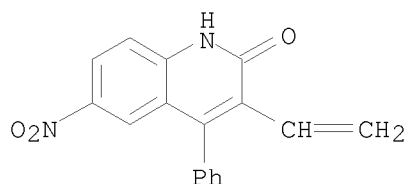


AB The preparation of a variety of title compds., e.g., I and II, via photochem. cyclization of 4-phenyl-3-vinylquinolines, e.g., III is reported. Thus, irradiation of III in C6H6 gave 72% I, whereas, irradiation of III in C6H6 containing iodine gave 54% II. Phenylvinylquinolones, e.g., IV, also underwent similar oxidative and nonoxidative photochem. cyclization. In several cases eliminative photolysis involving the loss of a chloro or methoxy group from the ortho position of the Ph groups was observed

IT 111507-68-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (chlorination of)

RN 111507-68-7 CAPLUS

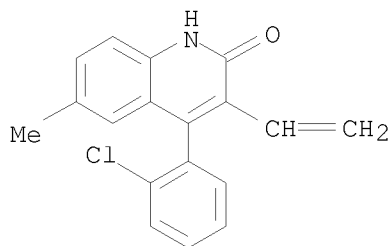
CN 2(1H)-Quinolinone, 3-ethenyl-6-nitro-4-phenyl- (CA INDEX NAME)



IT 62452-23-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (photochem. ring closure of)

RN 62452-23-7 CAPLUS

CN 2(1H)-Quinolinone, 4-(2-chlorophenyl)-3-ethenyl-6-methyl- (CA INDEX NAME)



L28 ANSWER 148 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:617504 CAPLUS

DOCUMENT NUMBER: 107:217504

ORIGINAL REFERENCE NO.: 107:34894h,34895a

TITLE: Mercury(II)-promoted cyclization of some 2-alkenylphenols and some cyclic 2-alkenyl-1,3-diketones, 3-keto esters, and 3-keto amides. Synthesis of 2,3-dihydrofuran, 3,4-dihydro-2H-pyran, and 2,3,4,5-tetrahydrooxepin rings fused on carbocyclic or on oxygen and nitrogen heterocyclic systems

AUTHOR(S): Bravo, Pierfrancesco; De Vita, Cristina; Ticozzi, Calimero; Viani, Fiorenza; Cavicchio, Giancarlo

CORPORATE SOURCE: Cent. Studio Sostanze Org. Nat., CNR, Milan, I-20133, Italy

SOURCE: Gazzetta Chimica Italiana (1986), 116(8), 441-7  
 CODEN: GCITA9; ISSN: 0016-5603

DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 107:217504  
GI

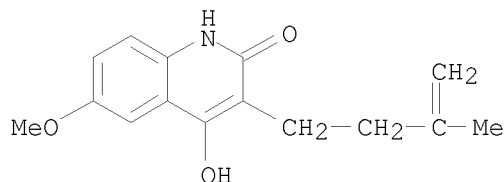
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB 2H-Pyran-2-ones I (R = Me, C<sub>6</sub>H<sub>4</sub>Me-p, C<sub>6</sub>H<sub>4</sub>OMe-p) were treated with Hg(OAc)<sub>2</sub> in THF and then with KCl in H<sub>2</sub>O to give the corresponding chloromercurymethyl-substituted 2H,5H-pyrano[4,3-b]pyran-5-ones II. 2(1H)-Quinolinones III (R<sub>1</sub> = R<sub>2</sub> = H, R<sub>3</sub> = H, OMe; R<sub>1</sub> = Me, R<sub>2</sub> = R<sub>3</sub> = H, OMe) also underwent the above Hg(II)-promoted cyclization to give 2H,5H-pyrano[3,2-c]quinolin-5-ones IV. Oxygen heterocyclic compds. V (R<sub>4</sub> = Me, Ph, n = 1; R<sub>4</sub> = Me, n = 2) and VI (R<sub>5</sub> = H, n = 1; R<sub>5</sub> = Me, CMe<sub>3</sub>, Ph, n = 2; R<sub>5</sub> = Me, n = 3) were prepared similarly from cyclohexanediones VII and phenols VIII, resp. The intramol. annulation was regioselective and followed the exo-trig route.

IT 109573-20-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclization of, mercury(II)-promoted)

RN 109573-20-8 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-(3-methyl-3-butenyl)- (9CI) (CA INDEX NAME)



L28 ANSWER 149 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:477595 CAPLUS

DOCUMENT NUMBER: 107:77595

ORIGINAL REFERENCE NO.: 107:12765a,12768a

TITLE: Selective method for 3-monoalkylation of 4-hydroxypyran-2-ones and of 4-hydroxyquinolin-2(1H)-ones or their N-methyl derivatives by ketone Mannich bases

AUTHOR(S): Bravo, Pierfrancesco; Resnati, Giuseppe; Viani, Fiorenza; Cavicchio, Giancarlo

CORPORATE SOURCE: Cent. Stud. Sostanze Org. Nat., Politec., Milan, Milan, I-20133, Italy

SOURCE: Journal of Chemical Research, Synopses (1986), (10), 374-5

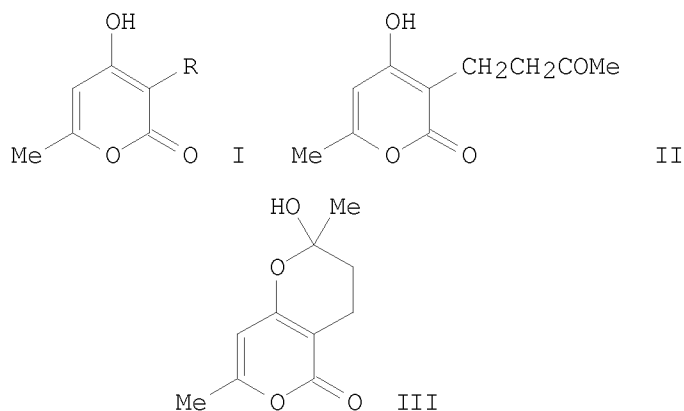
CODEN: JRPSDC; ISSN: 0308-2342

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 107:77595

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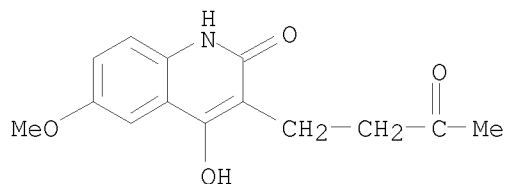


AB Hydroxyalkylquinolines and -pyranones, e.g. I (R = CH<sub>2</sub>CH<sub>2</sub>COMe, CH<sub>2</sub>CH<sub>2</sub>COCMe<sub>3</sub>, CH<sub>2</sub>CH<sub>2</sub>COC<sub>6</sub>H<sub>4</sub>Me-p, CH<sub>2</sub>CH<sub>2</sub>COC<sub>6</sub>H<sub>4</sub>OMe-p), were prepared by alkylating the corresponding hydroxyquinoline or hydroxypyranone with ketone Mannich bases. Thus, pyranone I (R = H) was treated with MeNCH<sub>2</sub>CH<sub>2</sub>COMe to give II, which exists in solution as a mixture with its cyclic hemiacetal III. Despite the presence of the hemiacetal form, the side chain carbonyl group of II showed normal reactivity toward Ph<sub>3</sub>P:CH<sub>2</sub> and MeMgCl to give I [R = CH<sub>2</sub>CH<sub>2</sub>C(:CH<sub>2</sub>)Me, CH<sub>2</sub>CH<sub>2</sub>C(OH)Me<sub>2</sub>] resp.

IT 109573-09-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, with methylenetriphenylphosphorane)

RN 109573-09-3 CAPLUS

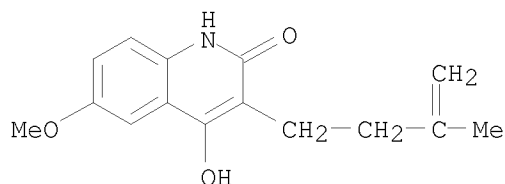
CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-(3-oxobutyl)- (CA INDEX NAME)



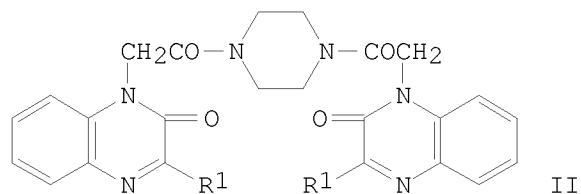
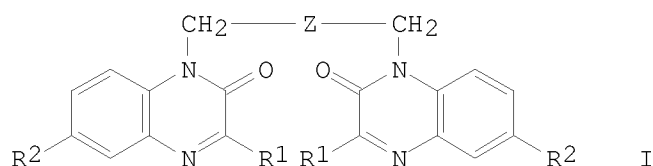
IT 109573-20-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 109573-20-8 CAPLUS

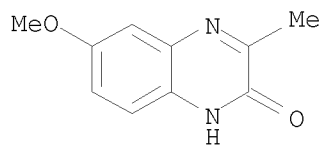
CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-(3-methyl-3-butenyl)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1987:423312 CAPLUS  
 DOCUMENT NUMBER: 107:23312  
 ORIGINAL REFERENCE NO.: 107:3943a,3946a  
 TITLE: Synthesis of bisquinoxaline derivatives with potential neoplastic activity  
 AUTHOR(S): Piatti, S. E.; Bekerman, D.; Gaozza, C. H.  
 CORPORATE SOURCE: Fac. Farm. Bioquim., Univ. Buenos Aires, Buenos Aires, 1113, Argent.  
 SOURCE: Anales de Quimica, Serie C: Quimica Organica y Bioquimica (1986), 82(2), 85-8  
 CODEN: AQSBD6; ISSN: 0211-1357  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Spanish  
 OTHER SOURCE(S): CASREACT 107:23312  
 GI

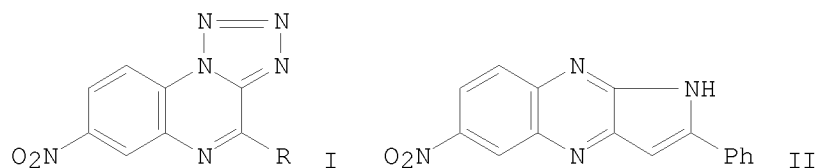


AB Bisquinoxalinones I [Z = (CH<sub>2</sub>)<sub>4</sub>, CONH(CH<sub>2</sub>)<sub>n</sub>NHCO (n = 2, 6); R<sub>1</sub> = H, Me; R<sub>2</sub> = H, OMe] were prepared; two I [Z = CONH(CH<sub>2</sub>)<sub>6</sub>NHCO] showed anti-tumor activity. Piperazines II (R<sub>1</sub> = H, Me) were also prepared  
 IT 108833-49-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and N-alkylation of, by organic dihalides)  
 RN 108833-49-4 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-methoxy-3-methyl- (CA INDEX NAME)

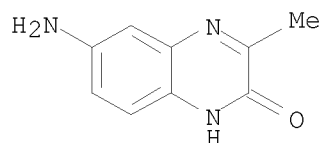


L28 ANSWER 151 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1987:138393 CAPLUS  
 DOCUMENT NUMBER: 106:138393  
 ORIGINAL REFERENCE NO.: 106:22581a,22584a  
 TITLE: Quinoxalines. XX. Synthesis and reactions of 6-nitroquinoxalines  
 AUTHOR(S): Lippmann, Eberhard; Burckhardt, Helmut  
 CORPORATE SOURCE: Sekt. Chem., Karl-Marx-Univ., Leipzig, DDR-7010, Ger. Dem. Rep.

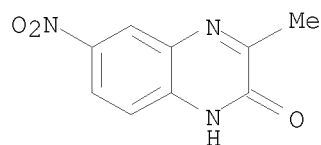
SOURCE: Zeitschrift fuer Chemie (1985), 25(12), 431  
 CODEN: ZECEAL; ISSN: 0044-2402  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 106:138393  
 GI



AB Cyclization of 2-hydrazino-3-methyl-6-nitroquinoxaline with NaNO<sub>2</sub> gave I  
 (R = Me). Thermolysis of I (R = CH:CHPh) in PhNO<sub>2</sub> gave 54% II.  
 IT 19801-05-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 19801-05-9 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-amino-3-methyl- (CA INDEX NAME)



IT 19801-10-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reduction of)  
 RN 19801-10-6 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)

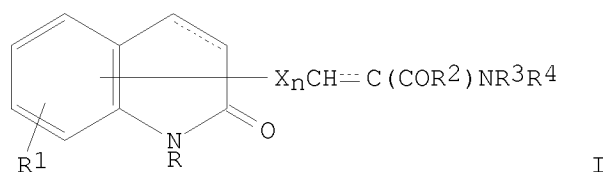


L28 ANSWER 152 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1987:50063 CAPLUS  
 DOCUMENT NUMBER: 106:50063  
 ORIGINAL REFERENCE NO.: 106:8291a,8294a  
 TITLE: Carbostyryl derivatives  
 PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 78 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60019767	A	19850131	JP 1983-126498	19830711
JP 02061923	B	19901221		
JP 01308258	A	19891212	JP 1989-109540	19890427
JP 05009429	B	19930204		
JP 05065273	A	19930319	JP 1992-55120	19920313
PRIORITY APPLN. INFO.:			JP 1983-126498	19830711
			JP 1989-109540	19890427

OTHER SOURCE(S): CASREACT 106:50063

GI

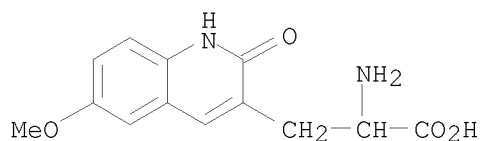


AB The title compds. [I; R = H, alkyl, alkenyl, alkynyl, phenylalkyl; R1 = H, halo, OH, (substituted) BzO, alkyl, alkoxy; R2 = OH, NH2, cycloalkylalkylamino, alkoxy, alkoxy carbonylalkoxy, etc.; R3 = H, OH, substituted PhSO2, etc.; R4 = H, substituted PhSO2; X = alkylene; n = 0, 1], useful as antiulcer agents, are prepared Thus, refluxing a mixture of 5 g Et 2-acetamido-2-carboxy-3 (1,2-dihydro-2-oxo-4-quinolinyl)propionate [obtained by treating 4-(bromomethyl)carbostyryl with AcNHCH(CO2Et) in HOEt/NaOEt] and 150 mL 20% HCl for 9 h gave 3.2 g 2-amino-3-(1,2-dihydro-2-oxo-4-quinolinyl)propionic acid-HCl.H2O. At 10 mg/kg orally twice daily 37 tested I inhibited ulcers by 13.5-38.5% in rats.

IT 90097-86-2P 90097-87-3P 90097-88-4P  
90098-62-7P 90098-63-8P 90098-99-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as anti-ulcer agent)

RN 90097-86-2 CAPLUS

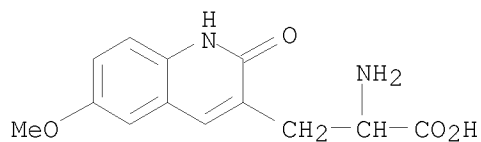
CN 3-Quinolinepropanoic acid,  $\alpha$ -amino-1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



RN 90097-87-3 CAPLUS

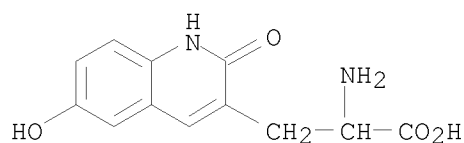
CN 3-Quinolinepropanoic acid,  $\alpha$ -amino-1,2-dihydro-6-methoxy-2-oxo-, monohydrochloride (9CI) (CA INDEX NAME)





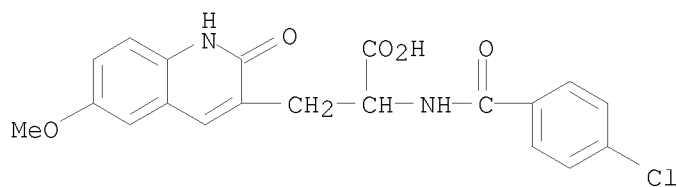
● HCl

RN 90097-88-4 CAPLUS  
 CN 3-Quinolinepropanoic acid,  $\alpha$ -amino-1,2-dihydro-6-hydroxy-2-oxo-, monohydrobromide (9CI) (CA INDEX NAME)

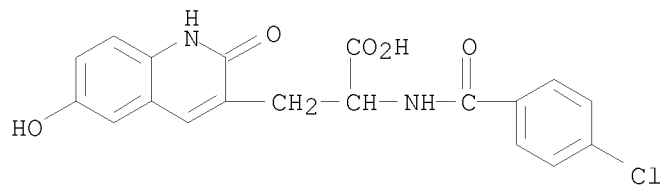


● HBr

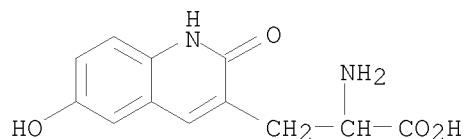
RN 90098-62-7 CAPLUS  
 CN 3-Quinolinepropanoic acid,  $\alpha$ -[(4-chlorobenzoyl)amino]-1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



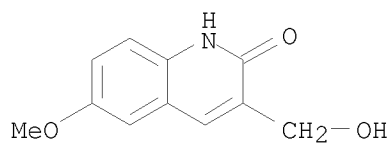
RN 90098-63-8 CAPLUS  
 CN 3-Quinolinepropanoic acid,  $\alpha$ -[(4-chlorobenzoyl)amino]-1,2-dihydro-6-hydroxy-2-oxo- (CA INDEX NAME)



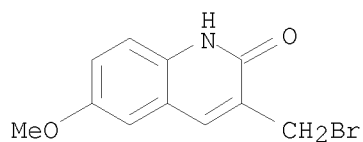
RN 90098-99-0 CAPLUS  
 CN 3-Quinolinepropanoic acid,  $\alpha$ -amino-1,2-dihydro-6-hydroxy-2-oxo- (CA INDEX NAME)



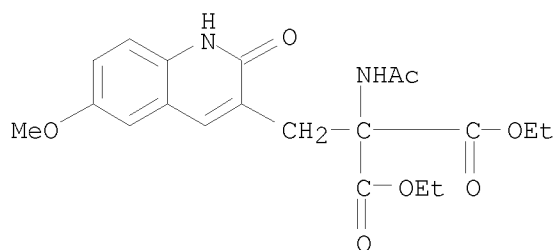
IT 90097-46-4P 90097-53-3P 90097-65-7P  
 104898-40-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as intermediate for anti-ulcer carbostyrils.)  
 RN 90097-46-4 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(hydroxymethyl)-6-methoxy- (CA INDEX NAME)



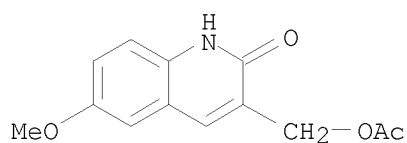
RN 90097-53-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(bromomethyl)-6-methoxy- (CA INDEX NAME)



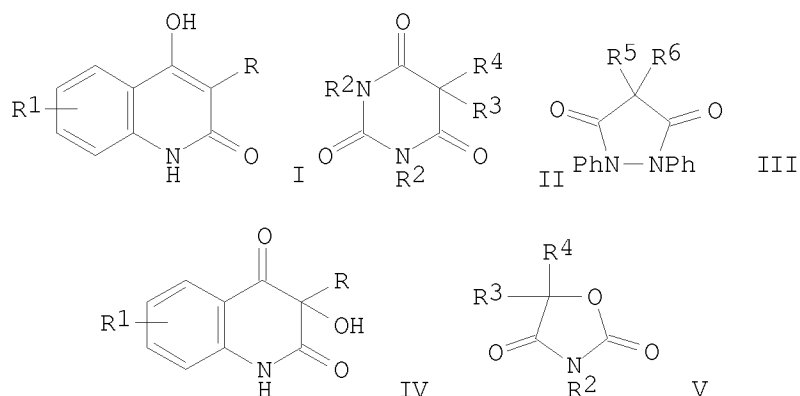
RN 90097-65-7 CAPLUS  
 CN Propanedioic acid, (acetylamino)[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)methyl]-, diethyl ester (9CI) (CA INDEX NAME)



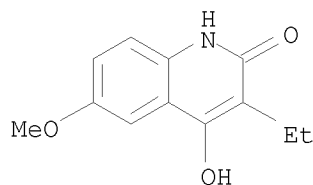
RN 104898-40-0 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[(acetyloxy)methyl]-6-methoxy- (CA INDEX NAME)



L28 ANSWER 153 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1986:497413 CAPLUS  
 DOCUMENT NUMBER: 105:97413  
 ORIGINAL REFERENCE NO.: 105:15745a,15748a  
 TITLE: Oxidative hydroxylation of heterocyclic  
 $\beta$ -dicarbonyl compounds  
 AUTHOR(S): Stadlbauer, Wolfgang; Kappe, Thomas  
 CORPORATE SOURCE: Inst. Org. Chem., Karl-Franzens-Univ., Graz, A-8010,  
 Austria  
 SOURCE: Monatshefte fuer Chemie (1985), 116(8-9), 1005-15  
 CODEN: MOCMB7; ISSN: 0026-9247  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 105:97413  
 GI

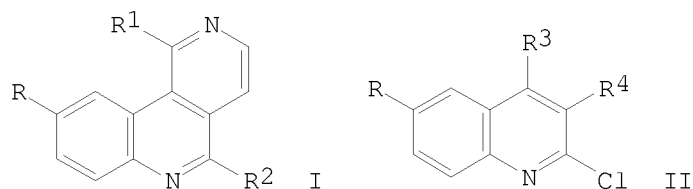


AB 4-Hydroxy-2-quinolones I (R = Ph, Et, PhCH<sub>2</sub>; R<sub>1</sub> = 6-, 8-Me, 6-, 7-, 8-MeO, 8-Ph), barbituric acids II (R<sub>2</sub> = R<sub>4</sub> = H, Me, Ph; R<sub>3</sub> = Ph, PhCH<sub>2</sub>) and pyrazolidine-2,4-diones III (R<sub>5</sub> = Ph, Bu, R<sub>6</sub> = H) were oxidized to quinolinediones IV, II (R<sub>4</sub> = OH), and IV (R<sub>6</sub> = OH), resp. II also gave oxazolidinediones V.  
 IT 103929-49-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and oxidative hydroxylation of)  
 RN 103929-49-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-4-hydroxy-6-methoxy- (CA INDEX NAME)

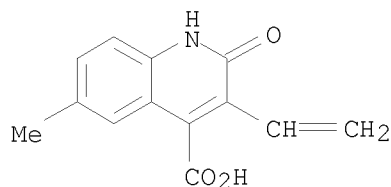


L28 ANSWER 154 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1986:168390 CAPLUS  
 DOCUMENT NUMBER: 104:168390

ORIGINAL REFERENCE NO.: 104:26675a,26678a  
 TITLE: A convenient synthesis of benzo[c][2,6]naphthyridines  
 AUTHOR(S): Rajamanickam, P.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641046, India  
 SOURCE: Synthesis (1985), (5), 541-3  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 104:168390  
 GI



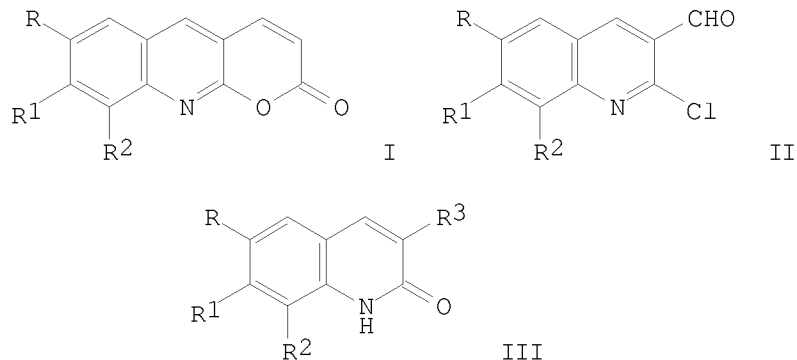
AB The title compds. (I; R = H, Cl, Me; R1 = R2 = Cl) were prepared by treating the oxopyranoquinolines II (R3R4 = CO2CH2CH2) with NH3-EtOH to give 79-90% II (R3 = CONH2, R4 = CH2CH2OH), which were cyclized by treatment with CrO3-AcOH to give 70-85% II (R3R4 = CONHCH:CH) (III). Heating III in POCl3 for 2 h yielded 61-68% I. I (R = H, R1 = R2 = Cl) was further treated with MeONa-MeOH to give I (R = H, R1 = R2 = MeO) and with H over Pd/C to give I (R = R1 = R2 = H).  
 IT 101560-89-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cyclization of)  
 RN 101560-89-8 CAPLUS  
 CN 4-Quinolinecarboxylic acid, 3-ethenyl-1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



L28 ANSWER 155 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1986:147895 CAPLUS  
 DOCUMENT NUMBER: 104:147895  
 ORIGINAL REFERENCE NO.: 104:23392h,23393a  
 TITLE: Synthesis and mass spectra of some 2H-pyrano(2,3-b)quinolin-2-ones  
 AUTHOR(S): Tilakraj, T.; Ambekar, Sarvottam Y.  
 CORPORATE SOURCE: Dep. Postgrad. Stud. Res. Chem., Univ. Mysore, Mysore, 570 006, India  
 SOURCE: Journal of the Indian Chemical Society (1985), 62(3), 251-3

DOCUMENT TYPE:  
LANGUAGE:  
OTHER SOURCE(S):  
GI

Journal  
English  
CASREACT 104:147895



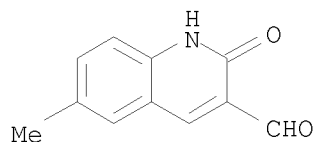
AB Title compds. I (R = H, Me, MeO; R1 = H, MeO, Cl; R2 = H, Me) were prepared by treating chloroformylquinolines II with HCl to give quinolones III (R3 = CHO), which were treated with CH<sub>2</sub>(CO<sub>2</sub>H)<sub>2</sub>, pyridine, and piperidine in EtOH to give III (R3 = CH:CHCO<sub>2</sub>H). The latter compds. were cyclized in polyphosphoric acid to give 46-95% I.

IT 101382-53-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and Knoevenagel reaction with malonic acid)

RN 101382-53-0 CAPLUS

CN 3-Quinolinecarboxaldehyde, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)

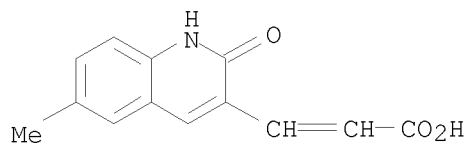


IT 101382-58-5P

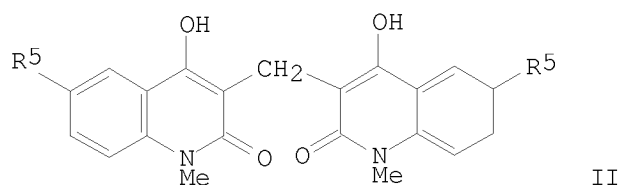
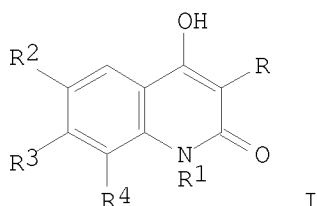
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and cyclization with polyphosphoric acid)

RN 101382-58-5 CAPLUS

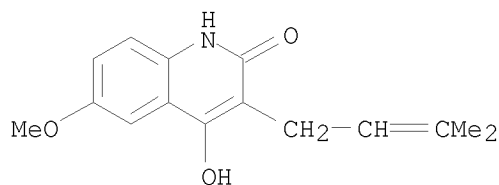
CN 2-Propenoic acid, 3-(1,2-dihydro-6-methyl-2-oxo-3-quinolinyl)- (CA INDEX NAME)



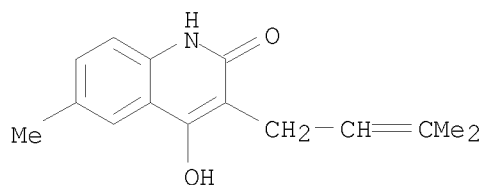
ORIGINAL REFERENCE NO.: 104:8193a,8196a  
 TITLE: Studies on potential agents acting on nervous system.  
 I. Synthesis of 4-hydroxy-3-(3-methyl-2-butenyl)-2-quinolone analogs  
 AUTHOR(S): Gu, Kunjian; Qian, Ligang; Ji, Ruyun  
 CORPORATE SOURCE: Shanghai Inst. Mater. Med., Acad. Sinica, Shanghai, Peop. Rep. China  
 SOURCE: Yaoxue Xuebao (1985), 20(4), 277-82  
 CODEN: YHHPAL; ISSN: 0513-4870  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 GI



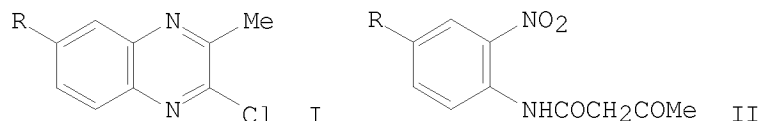
AB Quinolones I (R = Me, R1 = H, R2 = R3 = Cl; R = CH2CH:CMc2; R1 = H, Me; R2 = H, Me, OMe, Ac, Br, F, Cl; R3 = H, Cl; R4 = H, Cl) and bisquinolones II (R5 = Cl, F) were prepared by the cyclocondensation of substituted arylamines and substituted malonates. In preliminary test in mice, I showed analgesic, anticonvulsant or central nervous system depressant activities.  
 IT 56470-53-2P 99822-04-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation, analgesic, anticonvulsant, and central nervous system depressant activities of)  
 RN 56470-53-2 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



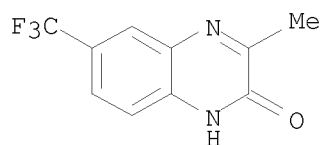
RN 99822-04-5 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



L28 ANSWER 157 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1985:541918 CAPLUS  
 DOCUMENT NUMBER: 103:141918  
 ORIGINAL REFERENCE NO.: 103:22727a,22730a  
 TITLE: Synthesis of novel 6-substituted 2-chloro-3-methylquinoxalines  
 AUTHOR(S): Makino, Kenzi; Sakata, Gozyo; Morimoto, Katsushi  
 CORPORATE SOURCE: Cent. Res. Inst., Nissan Chem. Ind., Ltd., Funabashi, 274, Japan  
 SOURCE: Heterocycles (1985), 23(8), 2069-74  
 CODEN: HTCYAM; ISSN: 0385-5414  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 103:141918  
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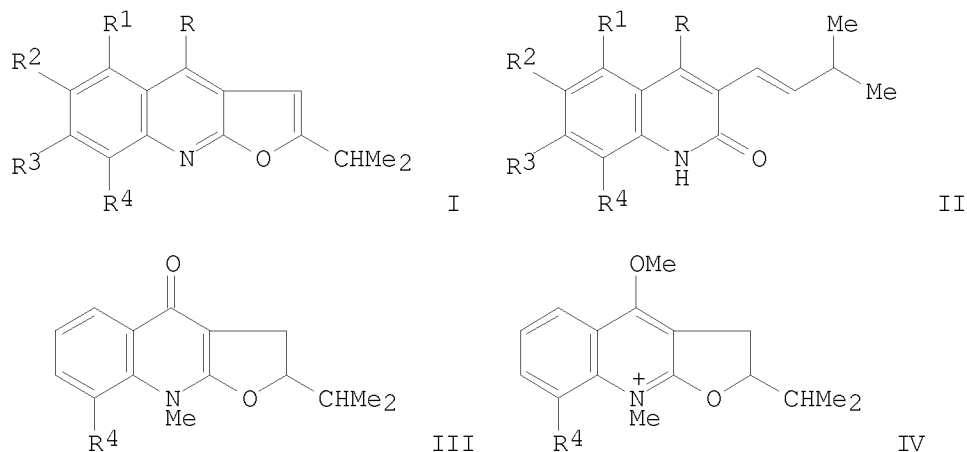


AB A 1-pot synthesis of 2-chloro-3-methylquinoxalines I (R = F, Cl, Br, CF3) was described. Thus, intramol. cyclization of nitroacetoacetanilides II in basic solution, followed by treatment with Et acetoacetate, then chlorination with phosphoryl chloride, gave I.  
 IT 98416-70-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and chlorination with phosphoryl chloride)  
 RN 98416-70-7 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-methyl-6-(trifluoromethyl)- (CA INDEX NAME)



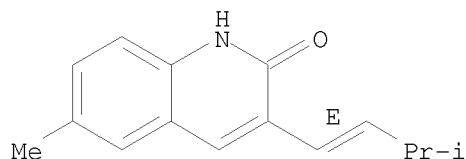
L28 ANSWER 158 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1985:406544 CAPLUS  
 DOCUMENT NUMBER: 103:6544  
 ORIGINAL REFERENCE NO.: 103:1179a,1182a  
 TITLE: Synthesis of 2-isopropylfuro(2,3-b)quinolines - a new synthesis of (+)-lunacrine, (+)-lunasine and

AUTHOR(S): Ramesh, M.; Mohan, P. S.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046, India  
 SOURCE: Tetrahedron (1984), 40(18), 3431-6  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB Nine furoquinolines I (R = H, Me, Ph, MeO, p-MeOC<sub>6</sub>H<sub>4</sub>, R<sub>1</sub> = H, Me; R<sub>2</sub> = H, Me, Cl; R<sub>3</sub> = H; R<sub>3</sub>R<sub>4</sub> = CH:CHCH:CH; R<sub>4</sub> = H, Me, MeO) were prepared by 2 methods from the quinolinones II II. (±)-Lunacrine III (R<sub>4</sub> = MeO), (±)-lunasine (IV), and (±)-demethoxylunacrine (III, R<sub>4</sub> = H) were prepared from the corresponding I (R = MeO).  
 IT 95687-73-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (ring closure of, furoisoquinoline derivative from)  
 RN 95687-73-3 CAPLUS  
 CN 2(1H)-Quinolinone, 6-methyl-3-(3-methyl-1-butenyl)-, (E)- (9CI) (CA INDEX NAME)

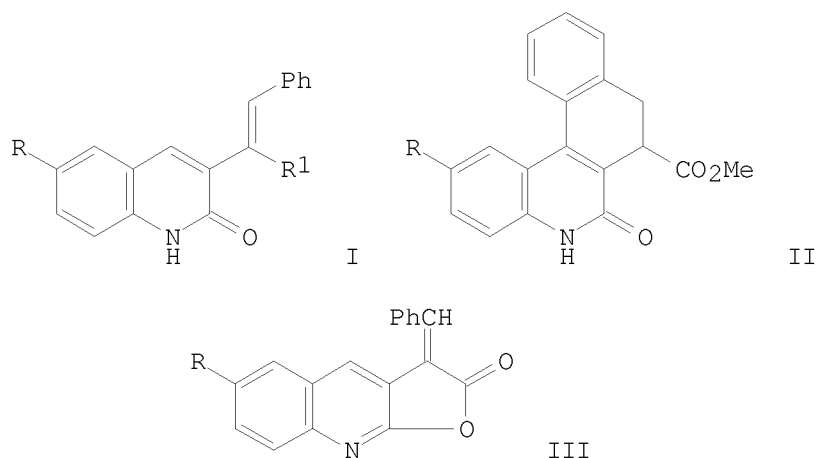
Double bond geometry as shown.



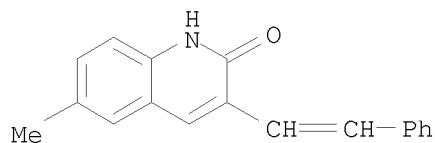
L28 ANSWER 159 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1985:24456 CAPLUS  
 DOCUMENT NUMBER: 102:24456  
 ORIGINAL REFERENCE NO.: 102:4031a, 4034a  
 TITLE: Benzo[k]phenanthridine: part V - nonoxidative photocyclization of 3-styrylquinolin-2(1H)-ones  
 AUTHOR(S): Arisvaran, V.; Rajan, R. D.; Shanmugam, P.



CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046, India  
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1984), 23B(9), 855-6  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



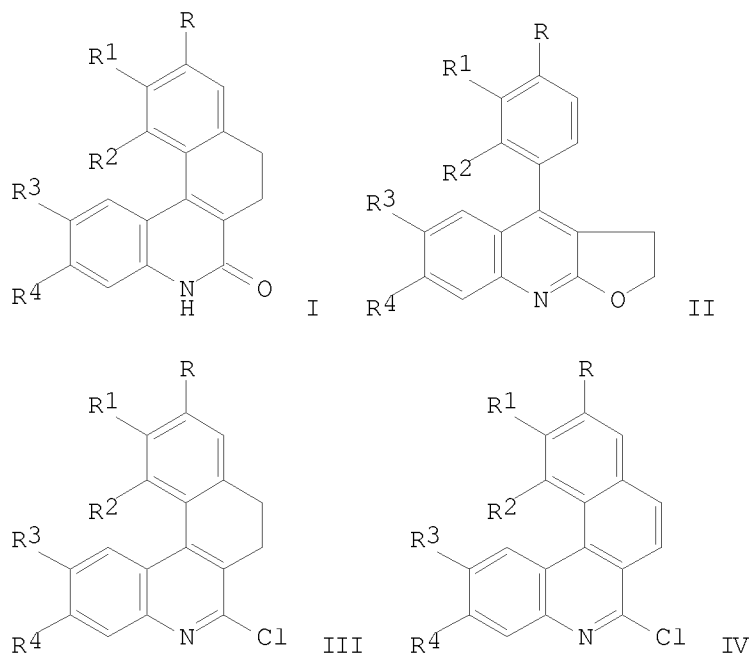
AB The styrylquinolinones I (R = H, Cl, Me, Br, R1 = CO2Me) underwent photocyclization in MeOH under anaerobic conditions to give the benzophenanthridines II in 63-72% yield. I (R1 = H) did not react under identical conditions. Irradiation of the benzylidene lactones III similarly gave II in 61-70% yield.  
 IT 80356-60-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (attempted photocyclization of)  
 RN 80356-60-1 CAPLUS  
 CN 2(1H)-Quinolinone, 6-methyl-3-(2-phenylethenyl)- (CA INDEX NAME)



L28 ANSWER 160 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1985:6166 CAPLUS  
 DOCUMENT NUMBER: 102:6166  
 ORIGINAL REFERENCE NO.: 102:1115a,1118a  
 TITLE: Synthesis of benzo[k]phenanthridines: part IV  
 AUTHOR(S): Paramasivam, K.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 046, India  
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1984), 23B(4), 311-15  
 CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE:  
LANGUAGE:  
GI

Journal  
English



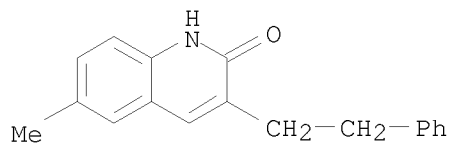
AB Dihydrobenzo[k]phenanthridines I (R, R1, R2 = H, Me, MeO; R3 = H, Cl, Br; R4 = H, Cl) were prepared by AlCl<sub>3</sub>-catalyzed rearrangement of phenyldihydrofuro[2,3-b]quinolines II. Treatment of I with POCl<sub>3</sub> gave chlorodihydrobenzo[k]phenanthridines III which are transformed into dehydro compds. IV by an allylic bromination-dehydrobromination sequence. The earlier proposed mechanism involving a primary carbonium ion intermediate was substantiated.

IT 93424-76-1P 93424-77-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

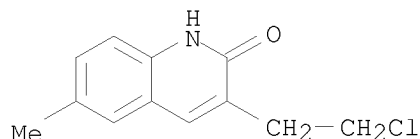
RN 93424-76-1 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-(2-phenylethyl)- (CA INDEX NAME)



RN 93424-77-2 CAPLUS

CN 2(1H)-Quinolinone, 3-(2-chloroethyl)-6-methyl- (CA INDEX NAME)



L28 ANSWER 161 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:454936 CAPLUS  
 DOCUMENT NUMBER: 101:54936  
 ORIGINAL REFERENCE NO.: 101:8532h,8533a  
 TITLE: Carbostyryl derivatives and pharmaceuticals containing them  
 INVENTOR(S): Uchida, Minoru; Komastu, Makoto; Nakagawa, Kazuyuki  
 PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan  
 SOURCE: Ger. Offen., 198 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3324034	A1	19840105	DE 1983-3324034	19830704
DE 3324034	C2	19930701		
JP 59007168	A	19840114	JP 1982-117311	19820705
JP 63035623	B	19880715		
JP 59007169	A	19840114	JP 1982-117312	19820705
JP 03028425	B	19910419		
FI 8302425	A	19840106	FI 1983-2425	19830701
FI 80022	B	19891229		
FI 80022	C	19900410		
US 4578381	A	19860325	US 1983-510241	19830701
BE 897208	A1	19840104	BE 1983-211114	19830704
DK 8303078	A	19840106	DK 1983-3078	19830704
DK 168288	B1	19940307		
NO 8302431	A	19840106	NO 1983-2431	19830704
NO 164835	B	19900813		
NO 164835	C	19901121		
SE 8303813	A	19840106	SE 1983-3813	19830704
SE 462848	B	19900910		
SE 462848	C	19910117		
AU 8316536	A	19840112	AU 1983-16536	19830704
AU 552717	B2	19860619		
CH 654578	A5	19860228	CH 1983-3667	19830704
AT 8302451	A	19870915	AT 1983-2451	19830704
AT 385506	B	19880411		
CA 1247624	A1	19881227	CA 1983-431763	19830704
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NL 194165	B	20010402		
NL 194165	C	20010803		
GB 2123825	A	19840208	GB 1983-18174	19830705
GB 2123825	B	19850918		
ZA 8304901	A	19840328	ZA 1983-4901	19830705
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JP 63190879	A	19880808	JP 1987-314429	19871211
JP 02042828	B	19900926		

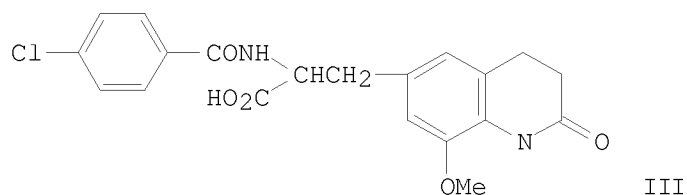
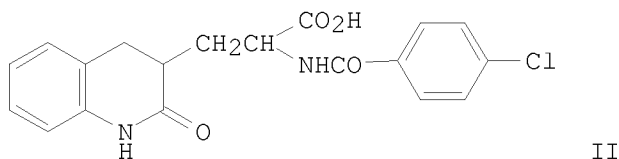
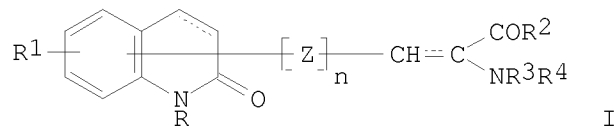
US 34722  
PRIORITY APPLN. INFO.:

E 19940906

US 1992-937382  
JP 1982-117311  
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19920831  
A 19820705  
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A5 19830701

OTHER SOURCE(S): MARPAT 101:54936  
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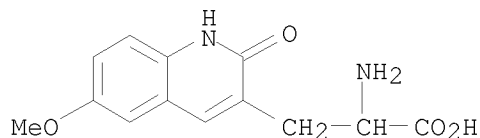


AB Title compds. I [R = H, lower alkyl, alkenyl, alkynyl, phenylalkyl; R1 = H, halo, (halo)benzoyloxy, OH, lower alkyl, alkoxy; R2 = OH, acid derivative; R3 = H, aroyl, arylsulfonyl, etc.; R4 = H, arylsulfonyl; Z = lower alkylene, n = 0, 1; dotted lines signify possible double bonds] and intermediates for them (.apprx.220 in all) were prepared in several conventional ways and shown in some cases to be more active as ulcer-healing agents than sucralfat. Typical of compds. prepared and tested were II and III.

IT 90097-86-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(acylation of)

RN 90097-86-2 CAPLUS

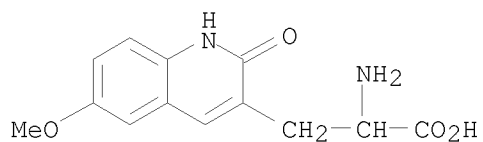
CN 3-Quinolinepropanoic acid,  $\alpha$ -amino-1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



IT 90097-87-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and demethylation of)

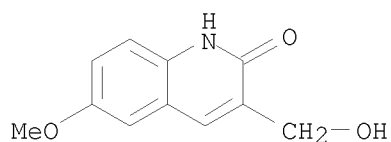
RN 90097-87-3 CAPLUS

CN 3-Quinolinepropanoic acid,  $\alpha$ -amino-1,2-dihydro-6-methoxy-2-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

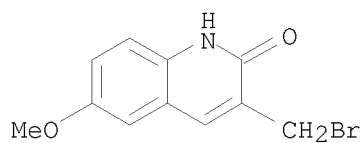


● HCl

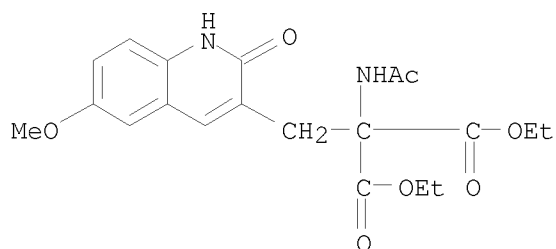
IT 90097-46-4P 90097-53-3P 90097-65-7P  
 90098-99-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 90097-46-4 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(hydroxymethyl)-6-methoxy- (CA INDEX NAME)



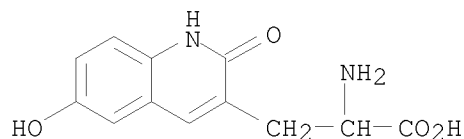
RN 90097-53-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(bromomethyl)-6-methoxy- (CA INDEX NAME)



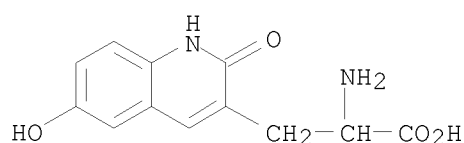
RN 90097-65-7 CAPLUS  
 CN Propanedioic acid, (acetylamino)[(1,2-dihydro-6-methoxy-2-oxo-3-quinolinyl)methyl]-, diethyl ester (9CI) (CA INDEX NAME)



RN 90098-99-0 CAPLUS  
 CN 3-Quinolinepropanoic acid,  $\alpha$ -amino-1,2-dihydro-6-hydroxy-2-oxo- (CA INDEX NAME)

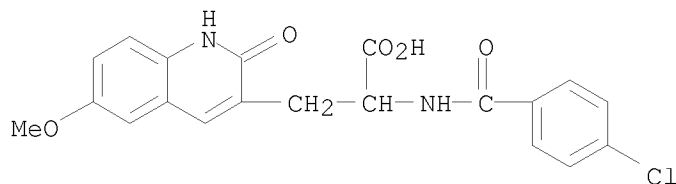


IT 90097-88-4P 90098-62-7P 90098-63-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, as antiulcer agent)  
 RN 90097-88-4 CAPLUS  
 CN 3-Quinolinepropanoic acid,  $\alpha$ -amino-1,2-dihydro-6-hydroxy-2-oxo-, monohydrobromide (9CI) (CA INDEX NAME)

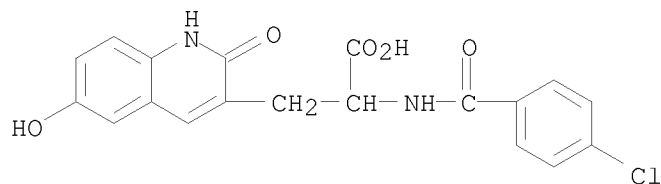


● HBr

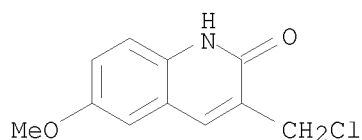
RN 90098-62-7 CAPLUS  
 CN 3-Quinolinepropanoic acid,  $\alpha$ -[(4-chlorobenzoyl)amino]-1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



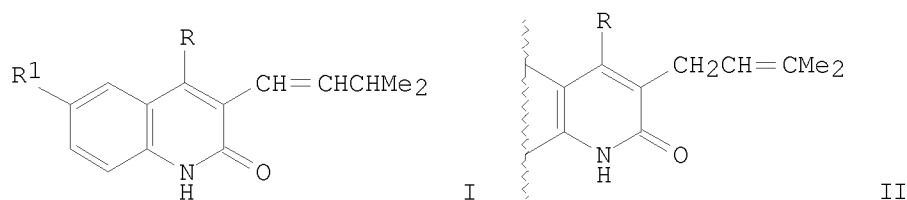
RN 90098-63-8 CAPLUS  
 CN 3-Quinolinepropanoic acid,  $\alpha$ -[(4-chlorobenzoyl)amino]-1,2-dihydro-6-hydroxy-2-oxo- (CA INDEX NAME)



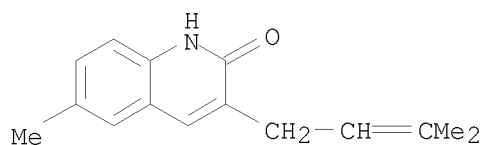
IT 90097-81-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with calcium acetate)  
 RN 90097-81-7 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(chloromethyl)-6-methoxy- (CA INDEX NAME)



L28 ANSWER 162 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1983:575561 CAPLUS  
 DOCUMENT NUMBER: 99:175561  
 ORIGINAL REFERENCE NO.: 99:26933a,26936a  
 TITLE: Sodium hydrogen telluride - a reagent for  
 distinguishing 3-vinylquinolone from 3-prenylquinolone  
 AUTHOR(S): Ramesh, M.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Bharathiar Univ., Coimbatore, 641 041,  
 India  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1983),  
 22B(6), 617-18  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
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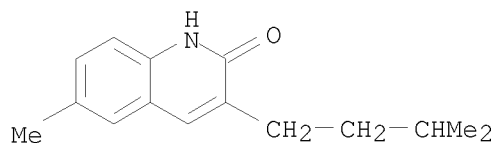


AB Vinylquinolones I (R = H, Me, p-anisyl, MeO, OH; R1 = H, Me, MeNH)  
 underwent reduction of the side chain double bond on treatment with NaHTe.  
 Prenylquinolones II, in contrast, remained unreacted even after prolonged  
 treatment with the reagent.  
 IT 82359-17-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (attempted reduction of, by sodium hydrogen telluride)  
 RN 82359-17-9 CAPLUS  
 CN 2(1H)-Quinolinone, 6-methyl-3-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



IT 87641-66-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 87641-66-5 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-(3-methylbutyl)- (CA INDEX NAME)

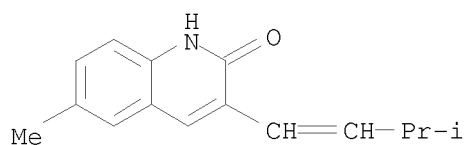


IT 82359-13-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reduction of, by sodium hydrogen telluride)

RN 82359-13-5 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-(3-methyl-1-butenyl)- (9CI) (CA INDEX NAME)



L28 ANSWER 163 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:439184 CAPLUS

DOCUMENT NUMBER: 97:39184

ORIGINAL REFERENCE NO.: 97:6711a,6714a

TITLE: A new synthesis of atanine, khaplofoline, and their analogs

AUTHOR(S): Ramesh, M.; Arisvaran, V.; Rajendran, S. P.; Shanmugam, P.

CORPORATE SOURCE: Dep. Chem., Madras Univ. Postgrad. Cent., Coimbatore, 641 041, India

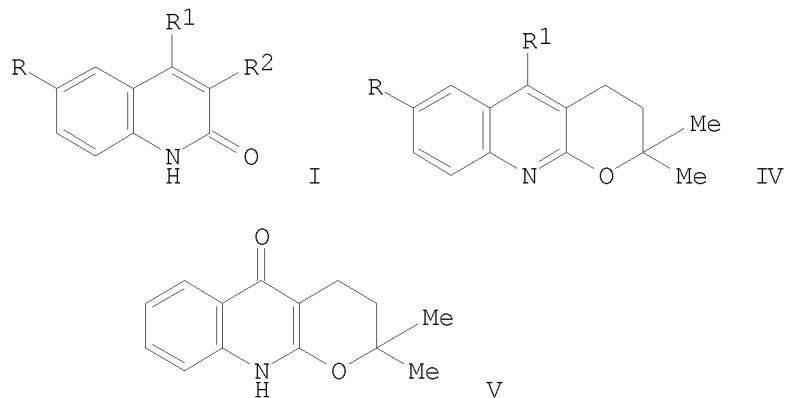
SOURCE: Tetrahedron Letters (1982), 23(9), 967-70

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Treatment of the acids I (R<sup>2</sup> = CH<sub>2</sub>CO<sub>2</sub>H) (R = H, R<sup>1</sup> = H, Me, OMe; R = Me,



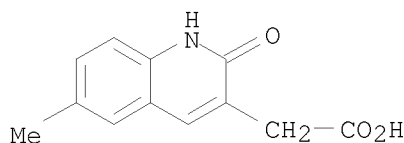
R1 = H) with Me<sub>2</sub>CHCHO gave 80-90% of the corresponding isobutyridene lactones, which on cleavage with aqueous alkali, followed by acidification, gave the vinyl acids I [R<sub>2</sub> = C(CO<sub>2</sub>H):CHCHMe<sub>2</sub>] quant. Decarboxylation of the latter with Cu/Ph<sub>2</sub>O gave 24-28% I (R, R<sub>1</sub> as before, R<sub>2</sub> = CH:CHCHMe<sub>2</sub>) (II) and 40-46% I (R, R<sub>1</sub> as before, R<sub>2</sub> = CH<sub>2</sub>CH:CMe<sub>2</sub>) (III). On heating with PPA, II gave 75-80% pyranoquinolines IV (R, R<sub>1</sub> as before). III (R = H, R<sub>1</sub> = OMe) is the alkaloid atanine. Demethylation of IV (R = H, R<sub>1</sub> = OMe) on boiling with HCl in EtOH gave 96% khaplofoline (V). Atanine and V occur in the Rutaceae.

IT 61020-52-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclocondensation of, with isobutyraldehyde, lactone by)

RN 61020-52-8 CAPLUS

CN 3-Quinolineacetic acid, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)

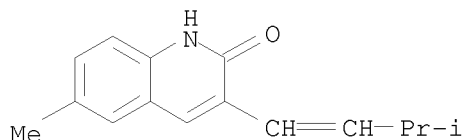


IT 82359-13-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and ring closure of)

RN 82359-13-5 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-(3-methyl-1-butenyl)- (9CI) (CA INDEX NAME)

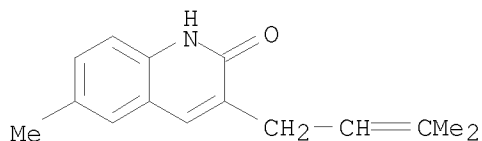


IT 82359-17-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 82359-17-9 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



L28 ANSWER 164 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:199482 CAPLUS

DOCUMENT NUMBER: 96:199482

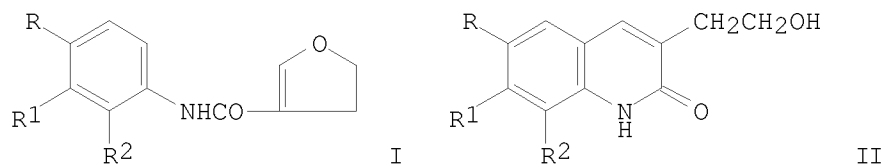
ORIGINAL REFERENCE NO.: 96:32891a,32894a

TITLE: A convenient one-step synthesis of  
3-(2-hydroxyethyl)-quinolin-2(1H)-ones

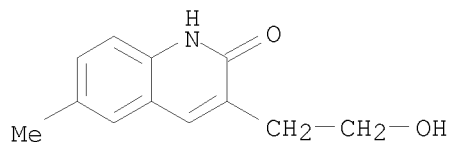
AUTHOR(S): Rajendran, S. P.; Arisvaran, V.; Ramesh, M.;  
Shanmugam, P.

CORPORATE SOURCE: Post-Grad. Cent., Madras Univ., Coimbatore, 641 041,

SOURCE: India  
 Synthesis (1982), (2), 160-2  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 96:199482  
 GI



AB Dihydrofurancarboxamides I were converted into title quinolinones II by reaction with a Lewis acid or by photochem. rearrangement. Among the 7 compds. prepared in 52-79% yield were II (R = H, Me, Cl, R1 = R2 = H; R = R1 = H, R2 = Cl, Me, OMe).  
 IT 62480-49-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 62480-49-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(2-hydroxyethyl)-6-methyl- (CA INDEX NAME)



L28 ANSWER 165 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1982:35046 CAPLUS  
 DOCUMENT NUMBER: 96:35046  
 ORIGINAL REFERENCE NO.: 96:5789a,5792a  
 TITLE: Synthesis of benzo[k]phenanthridines: another new approach  
 AUTHOR(S): Arisvaran, V.; Ramesh, M.; Rajendran, S. P.; Shanmugam, P.  
 CORPORATE SOURCE: Post-Grad. Cent., Madras Univ., Coimbatore, 641 041, India  
 SOURCE: Synthesis (1981), (10), 821-3  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 96:35046  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Refluxing quinolines I (R = H, Cl, Me) with PHCHO, HOAc and Ac2O gave II.

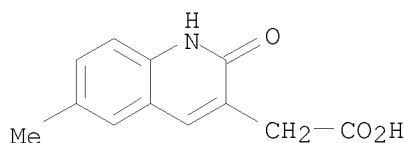
Treating II with aqueous NaOH followed by acidification gave III (R1 = CO2H), decarboxylation of which gave III (R1 = H). Irradiation of III (R1 = H) gave IV (R2 = H), chlorination of which gave V (R2 = H). Irradiation of II in MeOH gave IV (R2 = CO2Me), chlorination of which gave V (R2 = CO2Me).

IT 61020-52-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with benzaldehyde)

RN 61020-52-8 CAPLUS

CN 3-Quinolineacetic acid, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)

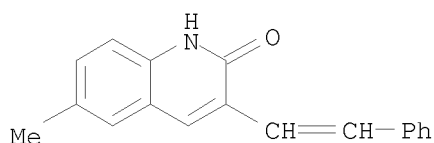


IT 80356-60-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and cyclization of, benzophenanthridine from)

RN 80356-60-1 CAPLUS

CN 2(1H)-Quinolinone, 6-methyl-3-(2-phenylethenyl)- (CA INDEX NAME)



L28 ANSWER 166 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1980:586292 CAPLUS

DOCUMENT NUMBER: 93:186292

ORIGINAL REFERENCE NO.: 93:29695a,29698a

TITLE: Quinoxalines. XII. Synthesis and reactions of 3-methyl-6-nitro-1H-quinoxalin-2-one derivatives

AUTHOR(S): Lippmann, Eberhard; Baumgartl, Monika

CORPORATE SOURCE: Sekt. Chem., Karl-Marx-Univ., Leipzig, DDR-7010, Ger. Dem. Rep.

SOURCE: Zeitschrift fuer Chemie (1980), 20(2), 58-9

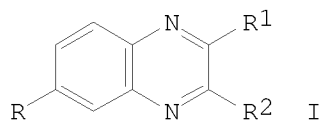
CODEN: ZECEAL; ISSN: 0044-2402

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 93:186292

GI



AB Kroehnke reaction of I (R = NO2, R1 = OH, R2 = Me) gave aldehyde I (R = NO2, R1 = OH, R2 = CHO), which reacted with PhCOH to give I (R = NO2, R1 =

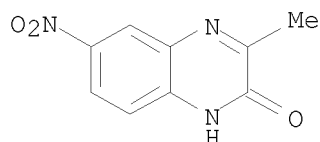
OH, R2 = styryl). Also prepared were I [R = NO<sub>2</sub>; R1 = OH, R2 = CH(OH)<sub>2</sub>; R1 = OMe, R2 = Me], I (R = H, R1 = OH, Cl; R2 = styryl) and I (R = H, R1 = Cl, R2 = Me).

IT 19801-10-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(Kroehnke reaction of, aldehyde from)

RN 19801-10-6 CAPLUS

CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)

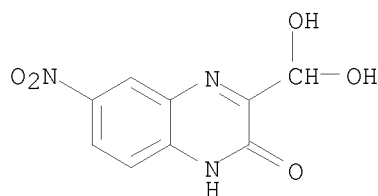


IT 75303-05-8P 75303-06-9P 75303-09-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

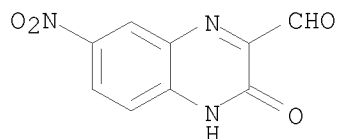
RN 75303-05-8 CAPLUS

CN 2(1H)-Quinoxalinone, 3-(dihydroxymethyl)-6-nitro- (CA INDEX NAME)



RN 75303-06-9 CAPLUS

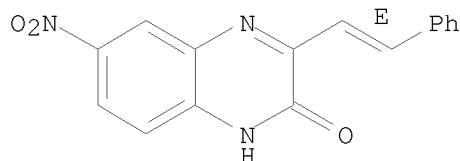
CN 2-Quinoxalinecarboxaldehyde, 3,4-dihydro-3-oxo-7-nitro- (9CI) (CA INDEX NAME)



RN 75303-09-2 CAPLUS

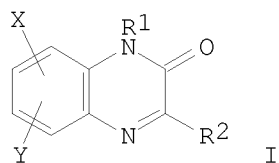
CN 2(1H)-Quinoxalinone, 6-nitro-3-(2-phenylethenyl)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



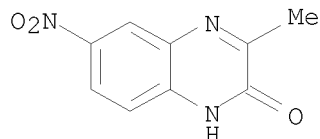
DOCUMENT NUMBER: 92:135453  
ORIGINAL REFERENCE NO.: 92:21965a,21968a  
TITLE: Quinoxalinone compounds useful for expanding the lumina or air passages in mammals  
INVENTOR(S): Hall, Charles M.; Johnson, Herbert G.  
PATENT ASSIGNEE(S): Upjohn Co., USA  
SOURCE: U.S., 8 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4181724	A	19800101	US 1978-940815	19780911
US 4242342	A	19801230	US 1979-44031	19790531
US 4262123	A	19810414	US 1979-44120	19790531
PRIORITY APPLN. INFO.:			US 1978-940815	A3 19780911
OTHER SOURCE(S):		CASREACT 92:135453; MARPAT 92:135453		
GI				



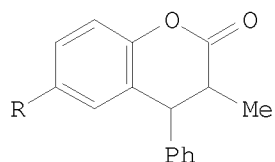
AB I (R1 = H, Me or Et; R2 = H, C1-6 alkyl, Ph, PhCH2, carboxyalkyl, alkoxy-carbonylalkyl, alkoxy-carbonyl, or haloalkyl; X = H or Cl, Y = H, Cl, or NO2) are prepared as bronchodilators and can be used for treatment of atopic eczema and urticaria. Pharmaceutical formulations are given. A lot of 10,000 tablets was prepared from 1,3-dimethyl-2(1H)-quinoxalione [3149-25-5] 250, CaHPO4 1000, Me cellulose 60, talc 150, starch 200 and Mg stearate 10 g. The tablets can be used for asthma treatment at a dose of 1 tablet every 4-6 h. 3,6,7-Trimethyl-2(1H)-quinoxalinone [28082-86-2] was prepared by condensation of 4,5-dimethyl-o-phenylenediamine [3171-45-7] in TFH with Et pyruvate [617-35-6].

IT 19801-10-6P  
RL: PREP (Preparation)  
(preparation of, for bronchodilating pharmaceuticals)  
RN 19801-10-6 CAPLUS  
CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)

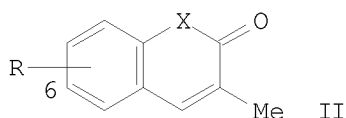


L28 ANSWER 168 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1979:557532 CAPLUS  
DOCUMENT NUMBER: 91:157532  
ORIGINAL REFERENCE NO.: 91:25421a,25424a  
TITLE: Synthesis of 3-methylcoumarins, -thiacoumarins and

AUTHOR(S): Manimaran, T.; Natarajan, M.; Ramakrishnan, V. T.  
 CORPORATE SOURCE: Dep. Org. Chem., Univ. Madras, Madras, 600 025, India  
 SOURCE: Proceedings - Indian Academy of Sciences, Section A  
 (1979), 88A(Pt. 1, No. 2), 125-30  
 CODEN: PISAA7; ISSN: 0370-0089  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 91:157532  
 GI

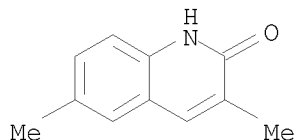


I

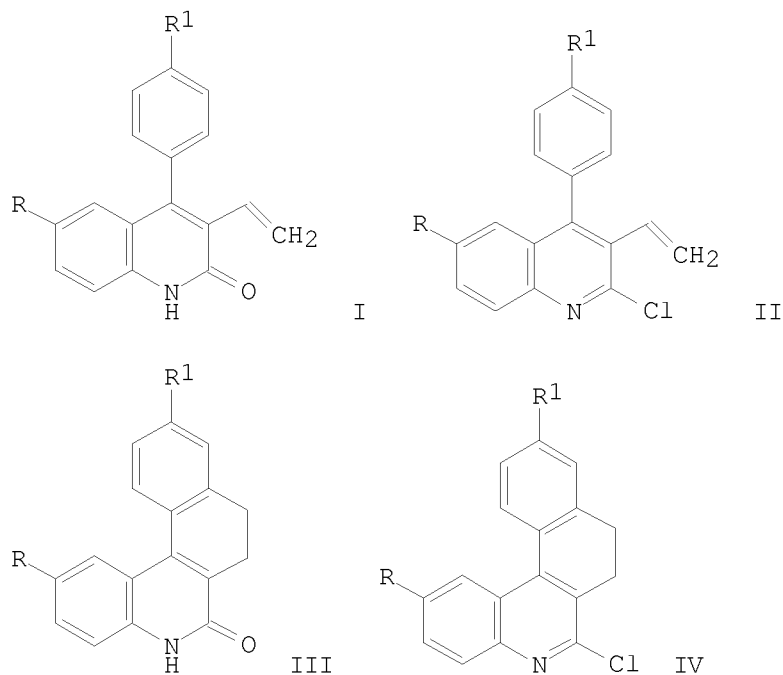


II

AB Reaction of 4-phenyl-3,4-dihydrocoumarins I (R = Me, Cl) with anhydrous AlCl<sub>3</sub> in PhCl at 120° resulted in dearylation to give II (X = O, R in 6-position). Thiocoumarins (II; X = S, R = H, 6-Me) and carbostyrils (II; X = NH, R = H, 6- or 8-Me or -Cl) were similarly prepared from RC<sub>6</sub>H<sub>4</sub>XCOCMe:CHPh.  
 IT 71568-50-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 71568-50-8 CAPLUS  
 CN 2(1H)-Quinolinone, 3,6-dimethyl- (CA INDEX NAME)



L28 ANSWER 169 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1979:54798 CAPLUS  
 DOCUMENT NUMBER: 90:54798  
 ORIGINAL REFERENCE NO.: 90:8761a,8764a  
 TITLE: Photolysis of 4-phenyl-3-vinylquinolines; a facile new route to the benzo[k]phenanthridine system  
 AUTHOR(S): Veeramani, K.; Paramasivam, K.;  
 Ramakrishnasubramanian, S.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Madras Univ. Auton. Post-Grad. Cent.,  
 Coimbatore, India  
 SOURCE: Synthesis (1978), (11), 855-7  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 90:54798  
 GI



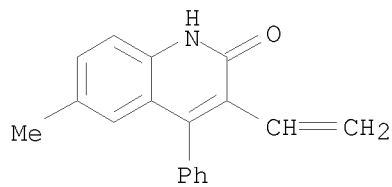
AB Photolysis of I- and II (R = H, Me, Cl; R1 = H, Me) yields III- and IV (R, R1 as above), resp., in good to excellent yields.

IT 61323-37-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(photolysis of, benzo[k]phenanthridine system from)

RN 61323-37-3 CAPLUS

CN 2(1H)-Quinolinone, 3-ethenyl-6-methyl-4-phenyl- (CA INDEX NAME)



L28 ANSWER 170 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1979:5637 CAPLUS

DOCUMENT NUMBER: 90:5637

ORIGINAL REFERENCE NO.: 90:1041a,1044a

TITLE: Studies in quinoxaline series. Part VIII.  
Ketimine-enamine tautomerism of 2-methylene-3-oxo-1,2,3,4-tetrahydroquinoxaline derivatives

AUTHOR(S): Machacek, Vladimir; Toman, Jaromir; Klicnar, Jiri  
CORPORATE SOURCE: Org. Chem. Dep., Inst. Chem. Technol., Pardubice, Czech.

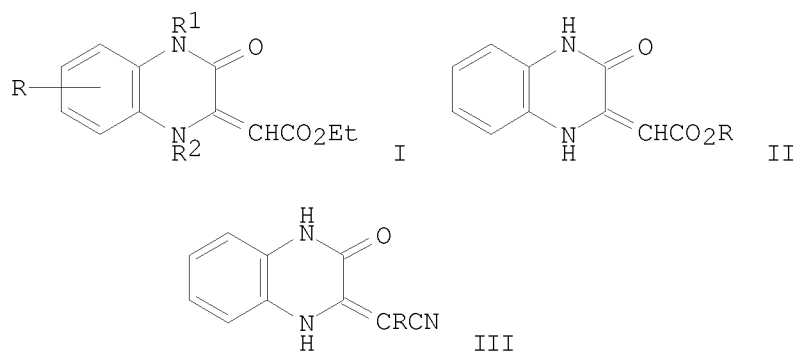
SOURCE: Collection of Czechoslovak Chemical Communications (1978), 43(6), 1634-8

CODEN: CCCCAK; ISSN: 0366-547X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



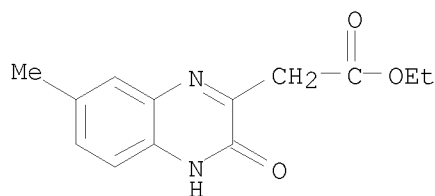
AB The ketimine-enamine equilibrium consts. of 12 compds., including I (R = R1 = R2 = H; R1 = Me, R = R2 = H; R = 6-Cl, 6-NO2, R2 = R1 = H), II (R = Me, Ph), and III (R = H, Me) are determined. Electron donating R in I destabilize the enamine form. The thermodyn., substituent effects, and H-bonding effects on the equilibrium are discussed.

IT 60810-06-2 67557-72-6

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)  
(tautomerism of, thermodyn. of)

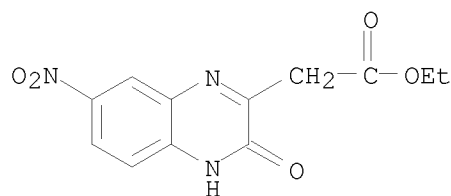
RN 60810-06-2 CAPLUS

CN 2-Quinoxalineacetic acid, 3,4-dihydro-7-methyl-3-oxo-, ethyl ester (CA INDEX NAME)



RN 67557-72-6 CAPLUS

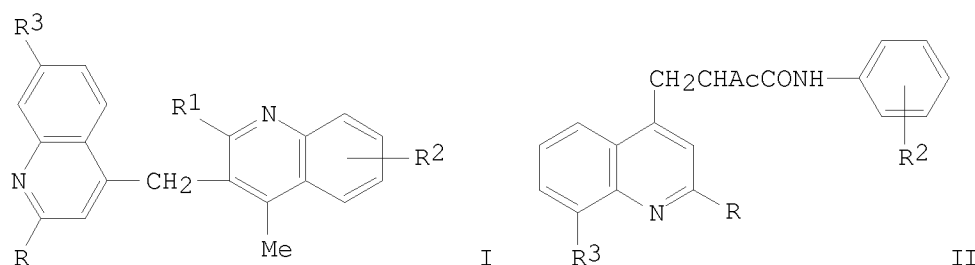
CN 2-Quinoxalineacetic acid, 3,4-dihydro-7-nitro-3-oxo-, ethyl ester (CA INDEX NAME)



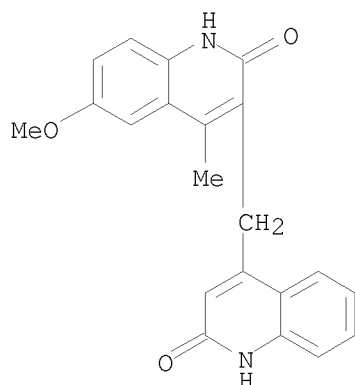
L28 ANSWER 171 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1978:509010 CAPLUS  
DOCUMENT NUMBER: 89:109010  
ORIGINAL REFERENCE NO.: 89:16777a,16780a



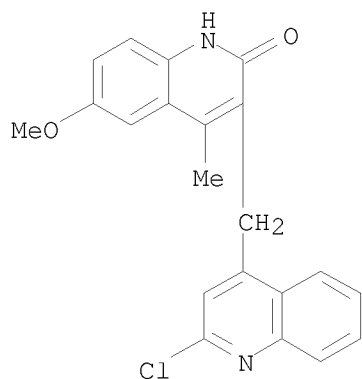
TITLE: Studies in the synthesis of quinoline derivatives.  
 Part VIII. Synthesis of 4:3'-methylenebis(2,2'-  
 dichloro-4'-methylquinoline) derivatives  
 AUTHOR(S): Thakore, P. V.; Trivedi, K. N.  
 CORPORATE SOURCE: Fac. Sci., Maharaja Sayajirao Univ. Baroda, Baroda,  
 India  
 SOURCE: Journal of the Indian Chemical Society (1977), 54(12),  
 1204-6  
 CODEN: JICSAH; ISSN: 0019-4522  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 89:109010  
 GI



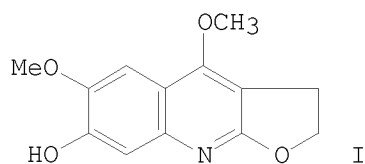
AB Methylenebisquinolines I (R = OH, Cl; R1 = OH; R2 = H, 6-OMe, 8-OMe, 7-Cl, 6-Cl, 6,7-CH:CHCH:CH; R3 = H, Me) were obtained in 40-50% yield by cyclizing quinolylacetoacetates II with concentrated H2SO4. I (R = R1 = Cl; R2 = H, 7-Cl, 8-Me, 6,7-CH:CHCH:CH; R3 = H, Me) were obtained by chlorinating I (R1 = OH). II were obtained in 70-80% yield by treating 4-halomethylquinolines with AcCHNaCONHC6H4R2.  
 IT 67288-26-0P 67288-27-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 67288-26-0 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[(1,2-dihydro-2-oxo-4-quinolinyl)methyl]-6-methoxy-4-methyl- (CA INDEX NAME)



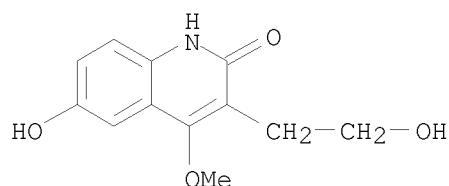
RN 67288-27-1 CAPLUS  
 CN 2(1H)-Quinolinone, 3-[(2-chloro-4-quinolinyl)methyl]-6-methoxy-4-methyl- (CA INDEX NAME)



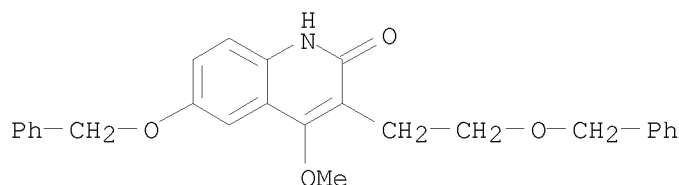
L28 ANSWER 172 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1978:121489 CAPLUS  
 DOCUMENT NUMBER: 88:121489  
 ORIGINAL REFERENCE NO.: 88:19081a,19084a  
 TITLE: Syntheses of heliparvifoline and O-demethylpteleine  
 AUTHOR(S): Sekiba, Tetsuya  
 CORPORATE SOURCE: Fac. Chem. Eng., Toyama Tech. Coll., Toyama, Japan  
 SOURCE: Bulletin of the Chemical Society of Japan (1978),  
 51(1), 325-6  
 CODEN: BCSJA8; ISSN: 0009-2673  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



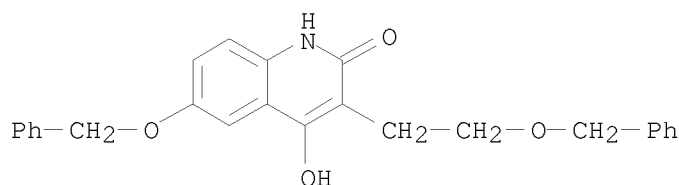
AB 2,3-Dihydroheliparvifoline (I) was obtained from 4-methoxy-3-benzyloxyaniline by condensation with di-Et (2-benzyloxyethyl)malonate, and by subsequent methylation, debenzylation, and then cyclodehydration. Benzyl ether of I was dehydrogenated and then treated with hydrochloric acid to give heliparvifoline.  
 IT 65907-22-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cyclodehydration of)  
 RN 65907-22-4 CAPLUS  
 CN 2(1H)-Quinolinone, 6-hydroxy-3-(2-hydroxyethyl)-4-methoxy- (CA INDEX NAME)



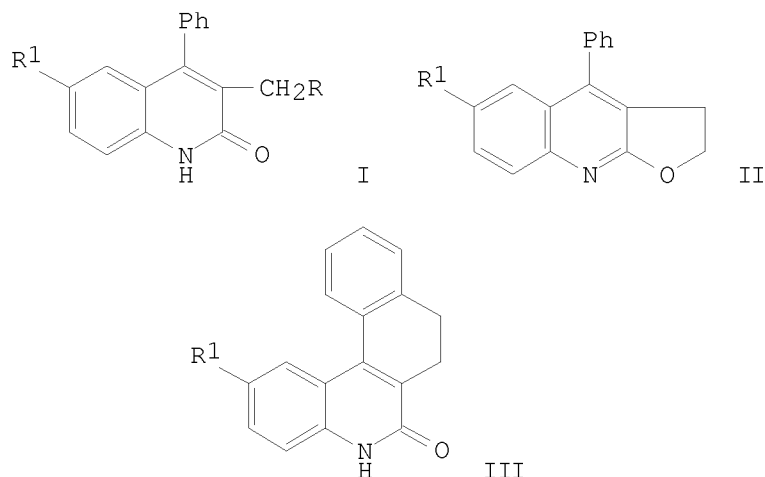
IT 65907-20-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and debenzylation of)  
 RN 65907-20-2 CAPLUS  
 CN 2(1H)-Quinolinone, 4-methoxy-6-(phenylmethoxy)-3-[2-(phenylmethoxy)ethyl]-  
 (CA INDEX NAME)



IT 65907-18-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and methylation of)  
 RN 65907-18-8 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-(phenylmethoxy)-3-[2-(phenylmethoxy)ethyl]-  
 (CA INDEX NAME)



L28 ANSWER 173 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1978:50624 CAPLUS  
 DOCUMENT NUMBER: 88:50624  
 ORIGINAL REFERENCE NO.: 88:7981a,7984a  
 TITLE: Furoquinolines; part XI. A novel aluminum  
 chloride-catalyzed rearrangement of  
 4-phenyl-2,3-dihydrofuro[2,3-b]quinolines. A new  
 route to the 5,6-benzophenanthridine system  
 AUTHOR(S): Paramasivam, K.; Ramasamy, K.; Shanmugam, P.  
 CORPORATE SOURCE: Dep. Chem., Madras Univ. Post Grad. Cent., Coimbatore,  
 India  
 SOURCE: Synthesis (1977), (11), 768-70  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 88:50624  
 GI

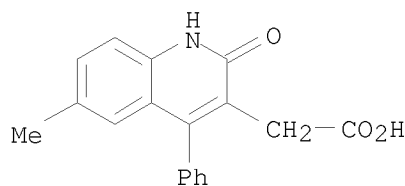


AB    Quinolines I (R = CO<sub>2</sub>H; R<sub>1</sub> = H, Me, Cl, Br) were prepared in 79-85% yield from the resp. 2-aminobenzophenones. I (R = CO<sub>2</sub>H) were converted to I (R = CO<sub>2</sub>Et, CH<sub>2</sub>OH) by esterification and reduction with LiAlH<sub>4</sub>, resp. Treatment of I (R = CH<sub>2</sub>OH) with polyphosphoric acid gave the furoquinolines II, which were treated with AlCl<sub>3</sub> in CH<sub>2</sub>Cl<sub>2</sub> to give 60-75% III. 9-Chlorophenanthridines were obtained in 26-32% yield by treatment of III with POCl<sub>3</sub>.

IT    65418-08-8P 65418-22-6P 65418-23-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reactions of)

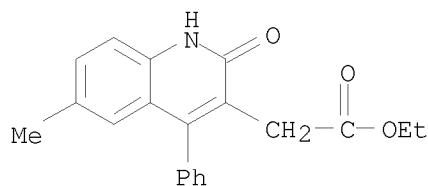
RN    65418-08-8    CAPLUS

CN    3-Quinolineacetic acid, 1,2-dihydro-6-methyl-2-oxo-4-phenyl- (CA INDEX NAME)



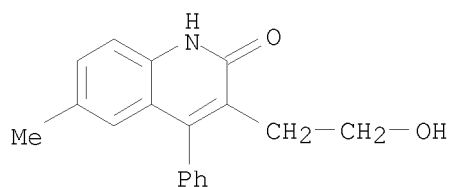
RN    65418-22-6    CAPLUS

CN    3-Quinolineacetic acid, 1,2-dihydro-6-methyl-2-oxo-4-phenyl-, ethyl ester (CA INDEX NAME)

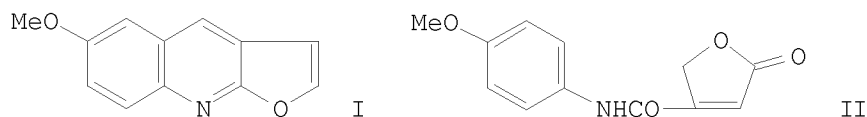


RN    65418-23-7    CAPLUS

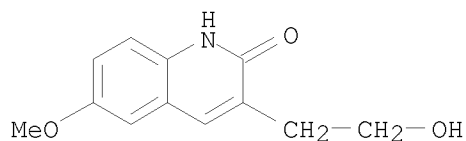
CN    2(1H)-Quinolinone, 3-(2-hydroxyethyl)-6-methyl-4-phenyl- (CA INDEX NAME)



L28 ANSWER 174 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1977:535153 CAPLUS  
 DOCUMENT NUMBER: 87:135153  
 ORIGINAL REFERENCE NO.: 87:21449a,21452a  
 TITLE: Furoquinolines, part 10. Synthesis of  
 furo[2,3-b]quinolines  
 AUTHOR(S): Shanmugam, P.; Thiruvengadam, T. K.; Ramasamy, K.  
 CORPORATE SOURCE: Dep. Chem., Madras Univ. Ext. Cent., Coimbatore, India  
 SOURCE: Monatshefte fuer Chemie (1977), 108(3), 725-33  
 CODEN: MOCMB7; ISSN: 0026-9247  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 87:135153  
 GI

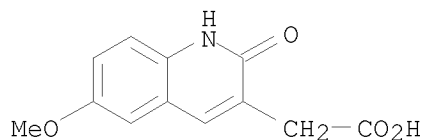


AB A new route to furo[2,3-b]quinolines, e.g. I, was developed based on  
 N-arylaconamides, e.g. II. The anilides when heated with polyphosphoric  
 acid underwent intramol. cyclization to give 1,2-dihydro-2-oxoquinoline-3-  
 acetic acids which were reduced and cyclized to give dihydrofuro[2,3-  
 b]quinolines. Dehydrogenation of the dihydro derivs. gave the  
 furo[2,3-b]quinolines.  
 IT 62480-48-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and cyclization of, dihydrofuroquinolines from)  
 RN 62480-48-2 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(2-hydroxyethyl)-6-methoxy- (CA INDEX NAME)

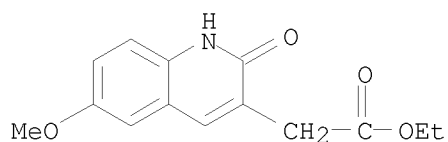


IT 64124-71-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reduction of)

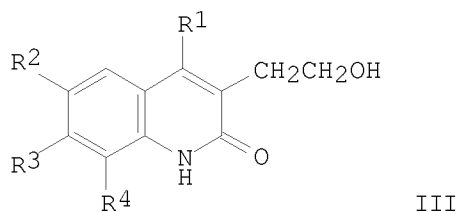
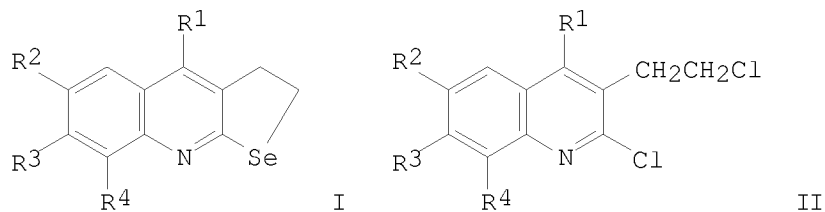
RN 64124-71-6 CAPLUS  
CN 3-Quinolineacetic acid, 1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



IT 64124-39-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 64124-39-6 CAPLUS  
CN 3-Quinolineacetic acid, 1,2-dihydro-6-methoxy-2-oxo-, ethyl ester (CA INDEX NAME)



L28 ANSWER 175 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1977:171294 CAPLUS  
DOCUMENT NUMBER: 86:171294  
ORIGINAL REFERENCE NO.: 86:26901a,26904a  
TITLE: Selenium heterocycles; Part I. Synthesis of  
2,3-dihydroselenolo[2,3-b]quinolines  
AUTHOR(S): Shanmugam, P.; Raja, T. K.  
CORPORATE SOURCE: Postgrad. Ext. Cent., Madras Univ., Tamil Nadu, India  
SOURCE: Synthesis (1977), (2), 117-18  
CODEN: SYNTBF; ISSN: 0039-7881  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

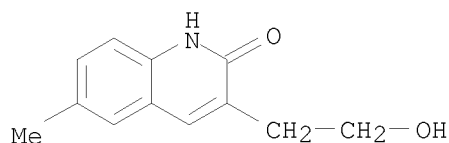


AB Selenoquinolines I (R1, R2, R3, R4 given; Me, H, H, H; H, Me, H, H; Me, H, H, MeO; H, H, H, H) were prepared in 69-82% yield by heating quinolines II with NaSeH in EtOH. II were prepared in 65-96% yield by heating III with POC13.

IT 62480-49-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with phosphorus oxychloride)

RN 62480-49-3 CAPLUS

CN 2(1H)-Quinolinone, 3-(2-hydroxyethyl)-6-methyl- (CA INDEX NAME)



L28 ANSWER 176 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:157046 CAPLUS

DOCUMENT NUMBER: 86:157046

ORIGINAL REFERENCE NO.: 86:24675a,24678a

TITLE: Disperse dyes

INVENTOR(S): Schwander, Hansrudolf; Burdeska, Kurt; Zickendraht, Christian

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Ger. Offen., 54 pp.  
 CODEN: GWXXBX

DOCUMENT TYPE: Patent

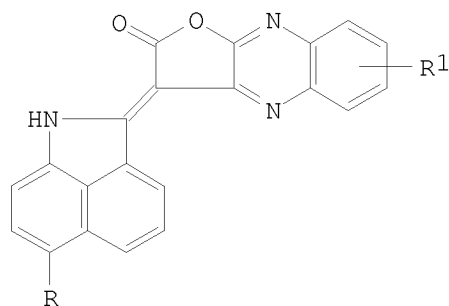
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 2606716	A1	19760902	DE 1976-2606716	19760219
DE 2606716	C2	19860430		
CH 615211	A5	19800115	CH 1975-2239	19750221
NL 7600768	A	19760824	NL 1976-768	19760126
US 4056528	A	19771101	US 1976-657771	19760213
FR 2301570	A1	19760917	FR 1976-4445	19760218
FR 2301570	B1	19780324		
BR 7601040	A	19760914	BR 1976-1040	19760219
JP 51107329	A	19760922	JP 1976-16579	19760219
JP 59022749	B	19840529		
CA 1058177	A1	19790710	CA 1976-246097	19760219
BE 838745	A1	19760820	BE 1976-164463	19760220
ES 445340	A1	19770601	ES 1976-445340	19760220
GB 1543362	A	19790404	GB 1976-6832	19760220
PRIORITY APPLN. INFO.:			CH 1975-2239	A 19750221

GI



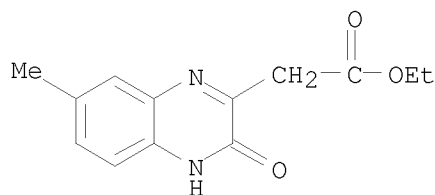
I

AB Dyes (I, R = H, MeO, Br, SO<sub>2</sub>NH(CH<sub>2</sub>)<sub>3</sub>OCHMe<sub>2</sub>; R<sub>1</sub> = H, MeO, Me, SO<sub>2</sub>NH(CH<sub>2</sub>)<sub>3</sub>OCHMe<sub>2</sub>) were prepared and used to dye acetate and polyester fibers fast red shades. Thus, POCl<sub>3</sub> was added to a mixture of naphthostyryl and Et (3-oxo-3,4-dihydro-2-quinoxalinyloxy)acetate in PhCl at 100° to give I (R = R<sub>1</sub> = H) [60809-87-2]. The other I were similarly prepared

IT 60810-06-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with naphthostyryl derivative)

RN 60810-06-2 CAPLUS

CN 2-Quinoxalineacetic acid, 3,4-dihydro-7-methyl-3-oxo-, ethyl ester (CA INDEX NAME)



L28 ANSWER 177 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:155542 CAPLUS

DOCUMENT NUMBER: 86:155542

ORIGINAL REFERENCE NO.: 86:24427a,24430a

TITLE: Thienoquinolines. Part V. An improved synthesis of 2,3-dihydrothieno[2,3-b]quinoline and its derivatives

AUTHOR(S): Shanmugam, P.; Thiruvengadam, T. K.; Soundararajan, N.

CORPORATE SOURCE: Postgrad. Cent., Madras Univ., Coimbatore, India

SOURCE: Organic Preparations and Procedures International (1976), 8(6), 279-82

CODEN: OPPIAK; ISSN: 0030-4948

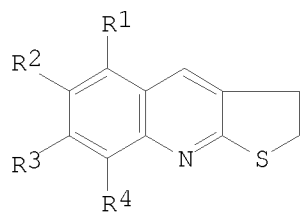
DOCUMENT TYPE: Journal

LANGUAGE: English

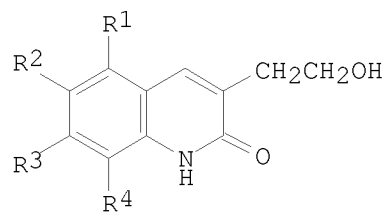
OTHER SOURCE(S): CASREACT 86:155542

GI





I



II

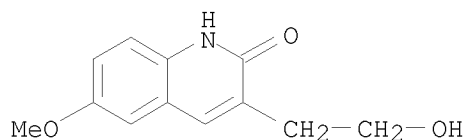
AB The title compds. I (R1, R2 = H, MeO, Me, Cl, R3 = H, Cl, R4 = H, MeO, Me) were obtained in 51-100% yields by cyclization of quinolones II by P2S5 in refluxing pyridine 4-6 h.

IT 62480-48-2 62480-49-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclization of, by phosphorus pentasulfide)

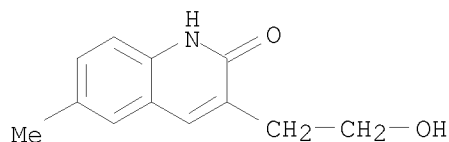
RN 62480-48-2 CAPLUS

CN 2(1H)-Quinolinone, 3-(2-hydroxyethyl)-6-methoxy- (CA INDEX NAME)



RN 62480-49-3 CAPLUS

CN 2(1H)-Quinolinone, 3-(2-hydroxyethyl)-6-methyl- (CA INDEX NAME)



L28 ANSWER 178 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:155538 CAPLUS

DOCUMENT NUMBER: 86:155538

ORIGINAL REFERENCE NO.: 86:24426h,24427a

TITLE: Thienoquinolines, IV. Synthesis of thieno[2,3-b]quinolines

AUTHOR(S): Shanmugam, P.; Kanakarajan, K.; Soundararajan, N.

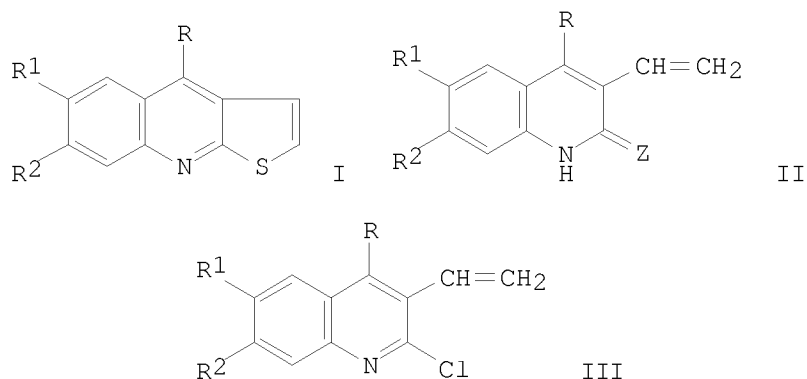
CORPORATE SOURCE: Postgrad. Cent., Madras Univ., Coimbatore, India

SOURCE: Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie (1976), 31B(12), 1685-8  
CODEN: ZNBAD2; ISSN: 0340-5087

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

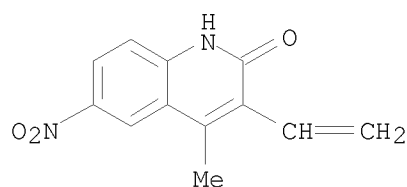


AB Eight thieno[2,3-b]quinolines (I, R = Me, Ph, C<sub>6</sub>H<sub>4</sub>Cl-o; R<sub>1</sub> = Cl, Br, NO<sub>2</sub>, Me; R<sub>2</sub> = Cl, H, or R<sub>1</sub>R<sub>2</sub> = OCH<sub>2</sub>O) were prepared by cyclization of the quinolinethiones II (Z = S), obtained by treating II (Z = O) with POCl<sub>3</sub> and the resulting chloroquinolines III with thiourea.

IT 62452-21-5P 62452-23-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and chlorination of)

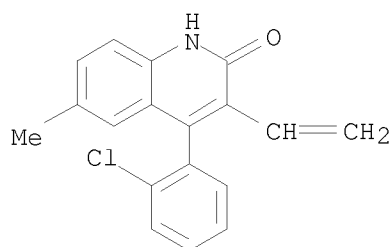
RN 62452-21-5 CAPLUS

CN 2(1H)-Quinolinone, 3-ethenyl-4-methyl-6-nitro- (CA INDEX NAME)



RN 62452-23-7 CAPLUS

CN 2(1H)-Quinolinone, 4-(2-chlorophenyl)-3-ethenyl-6-methyl- (CA INDEX NAME)



L28 ANSWER 179 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:29686 CAPLUS

DOCUMENT NUMBER: 86:29686

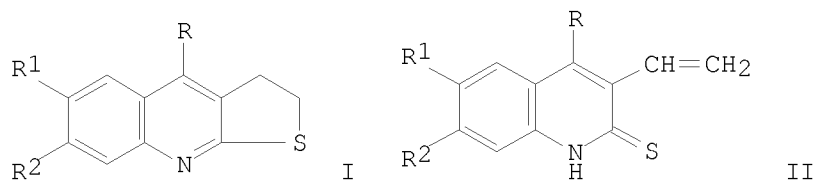
ORIGINAL REFERENCE NO.: 86:4747a, 4750a

TITLE: Thienoquinolines; Part III. Synthesis of 2,3-dihydrothieno[2,3-b]quinolines

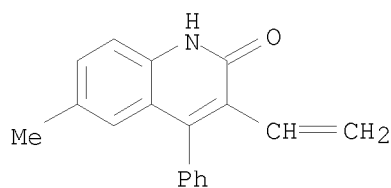
AUTHOR(S): Shanmugam, P.; Kanakarajan, K.; Soundararajan, N.

CORPORATE SOURCE: Dep. Chem., Univ. Madras, Coimbatore, India

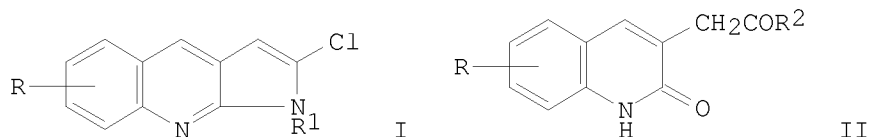
SOURCE: Synthesis (1976), (9), 595-6  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 86:29686  
 GI



AB Six thieno[2,3-b]quinolines I (R = Me, Ph; R1 = H, Me, MeO, Br; R2 = H, Me, Cl, MeO) were prepared in 9-46% yield by reaction of II with NaOAc. II (R, R1, R2 given; Ph, Me, H; Ph, Br, H) are new compds. and were prepared by known procedures from 5,2-R1(H2N)C6H3COPh.  
 IT 61323-37-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 61323-37-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-ethenyl-6-methyl-4-phenyl- (CA INDEX NAME)



L28 ANSWER 180 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1976:592597 CAPLUS  
 DOCUMENT NUMBER: 85:192597  
 ORIGINAL REFERENCE NO.: 85:30799a,30802a  
 TITLE: Pyrroloquinolines. Part 1. Synthesis of  
 1-aryl-2-chloro-1H-pyrrolo[2,3-b]quinolines  
 AUTHOR(S): Shanmugam, P.; Thiruvengadam, T. K.; Ramakrishnan, V.  
 T.  
 CORPORATE SOURCE: Ext. Cent., Madras Univ., Coimbatore, India  
 SOURCE: Synthesis (1976), 6, 393-4  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 85:192597  
 GI



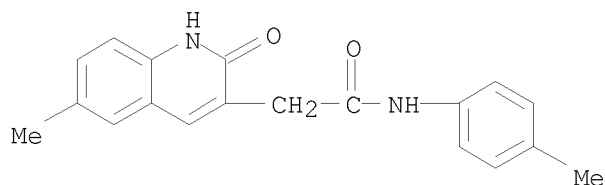
AB The title pyrrolo[2,3-b]quinolines I (R = H, R1 = p-MeC6H4, p-MeOC6H4; R = 6-Me, 8-Me, R1 = p-MeC6H4) were prepared by conversion of the oxoquinolineacetates II (same R; R2 = OEt) to the corresponding anilides II (same R; R2 = NHC6H4Me-p, NHC6H4OMe-p) with R1N(MgI)2, then cyclization of the anilides with POCl3.

IT 61020-57-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and cyclization with phosphoryl chloride)

RN 61020-57-3 CAPLUS

CN 3-Quinolineacetamide, 1,2-dihydro-6-methyl-N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)

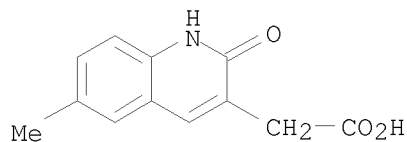


IT 61020-52-8P 61020-54-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and formation of pyrroloquinoline from)

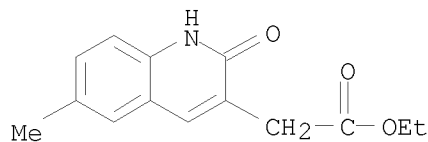
RN 61020-52-8 CAPLUS

CN 3-Quinolineacetic acid, 1,2-dihydro-6-methyl-2-oxo- (CA INDEX NAME)



RN 61020-54-0 CAPLUS

CN 3-Quinolineacetic acid, 1,2-dihydro-6-methyl-2-oxo-, ethyl ester (CA INDEX NAME)



L28 ANSWER 181 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:407248 CAPLUS

DOCUMENT NUMBER: 85:7248

ORIGINAL REFERENCE NO.: 85:1175a,1178a

TITLE: Bisazomethine-metal complex dyes  
 INVENTOR(S): L'Eplattenier, Francois; Vuitel, Laurent; Pugin, Andre  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: Ger. Offen., 26 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2533676	A1	19760219	DE 1975-2533676	19750728
DE 2533676	C2	19860102		
CH 596276	A5	19780315	CH 1974-10585	19740731
DK 7502888	A	19760201	DK 1975-2888	19750625
US 4008225	A	19770215	US 1975-599444	19750728
CA 1052782	A1	19790417	CA 1975-232451	19750729
BE 831902	A1	19760130	BE 1975-158751	19750730
NL 7509090	A	19760203	NL 1975-9090	19750730
FR 2280693	A1	19760227	FR 1975-23753	19750730
ES 439833	A1	19770616	ES 1975-439833	19750730
JP 51039726	A	19760402	JP 1975-94137	19750731
BR 7504896	A	19760803	BR 1975-4896	19750731
AU 7583570	A	19770203	AU 1975-83570	19750731
CS 185238	B2	19780915	CS 1975-5371	19750731
			CH 1974-10585	A 19740731

PRIORITY APPLN. INFO.:

GI For diagram(s), see printed CA Issue.

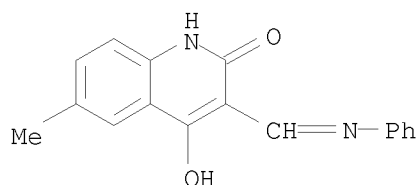
AB Ni, Cu, and Zn bisazomethines (I, A = quinoline, pyridine, pyrazole, triazole, isoindole, naphthalene, benzopyran residue; Z = o-C<sub>6</sub>H<sub>4</sub>, substituted o-C<sub>6</sub>H<sub>4</sub>, CH<sub>2</sub>CH<sub>2</sub>, benzimidazole-5,6-diyl; M = Ni, Cu, Zn) used as pigments for PVC [9002-86-2] were prepared in 37-100% yield by condensation of 2 moles of an o-hydroxyarylaldehyde derivative with 1 mole of Z(NH<sub>2</sub>)<sub>2</sub> in the presence of M<sup>2+</sup>.

IT 59313-33-6P

RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of)

RN 59313-33-6 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-[(phenylimino)methyl]- (CA INDEX NAME)



L28 ANSWER 182 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:180102 CAPLUS

DOCUMENT NUMBER: 84:180102

ORIGINAL REFERENCE NO.: 84:29187a, 29190a

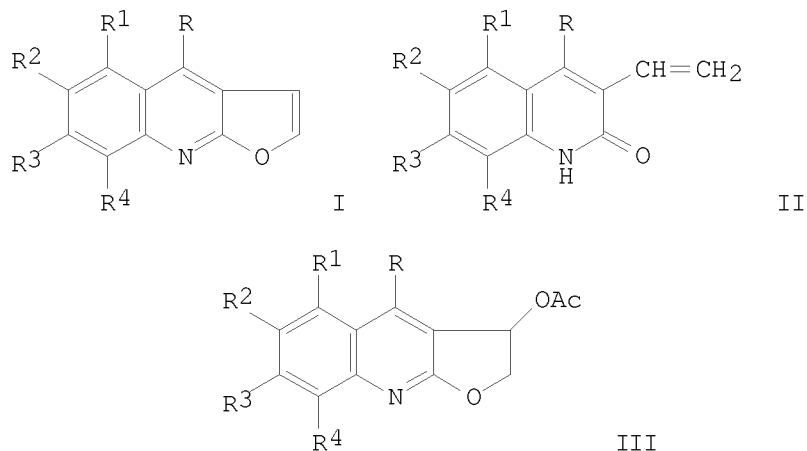
TITLE: Furoquinolines, part 9. Synthesis of  
 furo[2,3-b]quinolines

AUTHOR(S): Shanmugam, P.; Palaniappan, R.; Soundararajan, N.;  
 Thiruvengadam, T. K.; Kanakarajan, K.

CORPORATE SOURCE: Extens. Cent., Madras Univ., Coimbatore, India

SOURCE: Monatshefte fuer Chemie (1976), 107(1), 259-69

DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 84:180102  
 GI

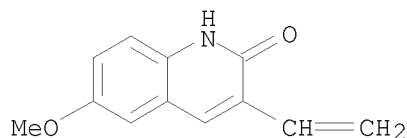


AB The furo[2,3-b]quinolines I (R = H, Me; R1-R4 = H, MeO, Cl, Br; R2R3 = OCH2O) was prepared by acetoxycyclization of the vinylquinolones II by treating with iodine in the presence of silver acetate and dehydroacetoxylation of the 3-acetoxy-2,3-dihydrofuro[2,3-b]quinoline III with phosphoric or polyphosphoric acid.

IT 59236-20-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cyclization of, furoquinolines from)

RN 59236-20-3 CAPLUS

CN 2(1H)-Quinolinone, 3-ethenyl-6-methoxy- (CA INDEX NAME)



L28 ANSWER 183 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:88992 CAPLUS

DOCUMENT NUMBER: 84:88992

ORIGINAL REFERENCE NO.: 84:14521a,14524a

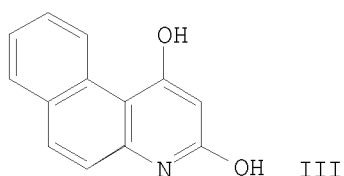
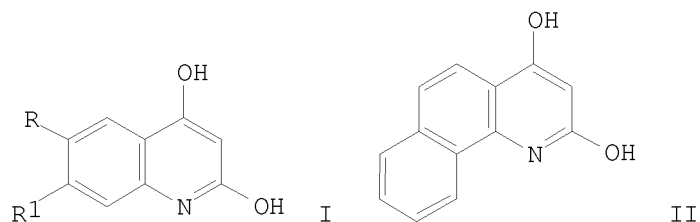
TITLE: Absorption spectra of cyanacet arylamides, dihydroxyquinolines, and their methylene bis-derivatives

AUTHOR(S): Trivedi, J. M.; Meththa, C. M.

CORPORATE SOURCE: Fac. Sci., Maharaja Sajirao Univ. Baroda, Baroda, India

SOURCE: Journal of the Indian Chemical Society (1975), 52(8), 708-10  
 CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

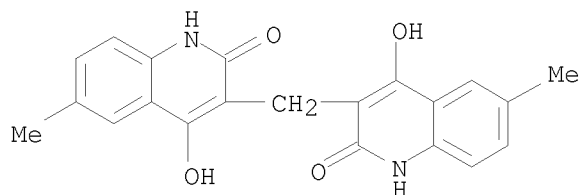


AB The uv of six NCCH<sub>2</sub>CONHR (R = e.g., p-ClC<sub>6</sub>H<sub>4</sub>, p-MeC<sub>6</sub>H<sub>4</sub>,  $\alpha$ -naphthyl,  $\beta$ -naphthyl) and their methylenebis- derivs. and of I (R<sub>1</sub> = H; R = Cl, Me; R = R<sub>1</sub> = Me), II, and III and their 3,3'-bis-methylene derivs. exhibited a hyperchromic effect in which the extinction coeffs. of the methylenebis compds. were always larger than those of the parent mols.

IT 43015-59-4  
 RL: PRP (Properties)  
 (uv and extinction coeffs. of dihydroxyquinoline in relation to uv of)

RN 43015-59-4 CAPLUS

CN 2(1H)-Quinolinone, 3,3'-methylenebis[4-hydroxy-6-methyl- (CA INDEX NAME)



L28 ANSWER 184 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:461667 CAPLUS

DOCUMENT NUMBER: 83:61667

ORIGINAL REFERENCE NO.: 83:9741a,9744a

TITLE: Azomethine pigments

INVENTOR(S): L'Eplattenier, Francois; Pugin, Andre; Vuitel, Laurent

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Ger. Offen., 66 pp.  
 CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2442315	A1	19750313	DE 1974-2442315	19740904
DE 2442315	C2	19870102		
CH 581683	A5	19761115	CH 1973-12889	19730907
US 3974149	A	19760810	US 1974-502246	19740830
NL 7411751	A	19750311	NL 1974-11751	19740904
JP 50055621	A	19750515	JP 1974-102457	19740905
JP 58050261	B	19831109		
GB 1455369	A	19761110	GB 1974-38775	19740905
CS 187422	B2	19790131	CS 1974-6111	19740905
CA 1050992	A1	19790320	CA 1974-208575	19740905
BE 819627	A1	19750306	BE 1974-148278	19740906
FR 2243235	A1	19750404	FR 1974-30275	19740906
FR 2243235	B1	19790601		
AU 7473062	A	19760311	AU 1974-73062	19740906
ES 429803	A1	19761001	ES 1974-429803	19740906
US 4024132	A	19770517	US 1976-693388	19760607
PRIORITY APPLN. INFO.:			CH 1973-12889	A 19730907
			US 1974-502246	A3 19740830

GI For diagram(s), see printed CA Issue.

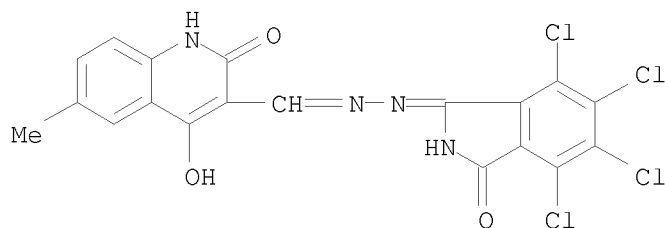
AB Azomethines (I, R, R1 = H, Cl; R2, R3 = H, Cl, MeO; A = naphthalene, quinoline, isoquinoline, pyrazole, coumarin, pyrimidine benzimidazolopyridine residues) were prepared and were heated with Ni, Cu, Cd, and Zn salt to give the corresponding metallized azomethine pigments which were used for coloring PVC [9002-86-2] and in printing inks. Thus, a mixture of (4,5,6,7-tetrachloroisoindolin-1-on-3-ylidene)hydrazine [41595-15-7] and 1,2,3-OHC(HO)C10H5CONHPh [52084-73-8] in Me Cellosolve was refluxed to give the azomethine derivative which was treated with Ni(OAc)<sub>2</sub> in Me Cellosolve to give azomethine pigment (II) [55644-37-6]. The other azomethine pigments were similarly prepared

IT 55566-86-4P 55566-92-2P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)

RN 55566-86-4 CAPLUS

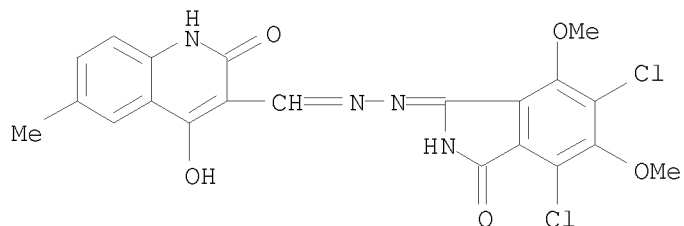
CN 3-Quinolinecarboxaldehyde, 2,4-dihydroxy-6-methyl-, (4,5,6,7-tetrachloro-1-oxo-1H-isoindol-3-yl)hydrazone (9CI) (CA INDEX NAME)



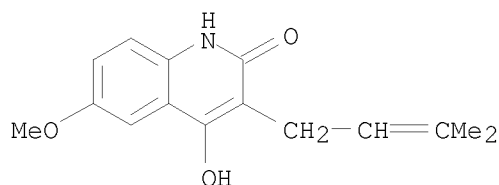
RN 55566-92-2 CAPLUS

CN 3-Quinolinecarboxaldehyde, 2,4-dihydroxy-6-methyl-, (5,7-dichloro-4,6-dimethoxy-1-oxo-1H-isoindol-3-yl)hydrazone (9CI) (CA INDEX NAME)





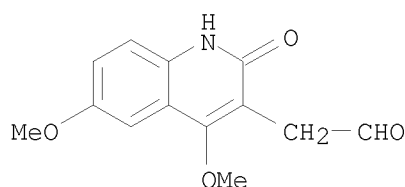
L28 ANSWER 185 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1975:443554 CAPLUS  
 DOCUMENT NUMBER: 83:43554  
 ORIGINAL REFERENCE NO.: 83:6907a,6910a  
 TITLE: Synthesis of haplamine  
 AUTHOR(S): Venturella, Pietro; Bellino, Aurora; Piozzi, Franco  
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Palermo, Palermo, Italy  
 SOURCE: Heterocycles (1975), 3(5), 367-70  
 CODEN: HTCYAM; ISSN: 0385-5414  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB 4-Hydroxy-6-methoxy-2-quinolone was monoalkylated by Me<sub>2</sub>C:CHCH<sub>2</sub>Br and then cyclized by dichlorodicyanobenzoquinone to give haplamine (I).  
 IT 56470-53-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cyclization of)  
 RN 56470-53-2 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



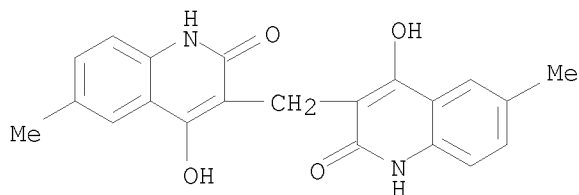
L28 ANSWER 186 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1975:410531 CAPLUS  
 DOCUMENT NUMBER: 83:10531  
 ORIGINAL REFERENCE NO.: 83:1773a,1776a  
 TITLE: Synthetic application of lithiation reactions. VI. New synthesis of linear furoquinoline alkaloids  
 AUTHOR(S): Narasimhan, N. S.; Mali, R. S.  
 CORPORATE SOURCE: Dep. Chem., Univ. Poona, Poona, India  
 SOURCE: Tetrahedron (1974), 30(23/24), 4153-7  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 83:10531  
 GI For diagram(s), see printed CA Issue.  
 AB Lithiated 2,4-dimethoxyquinoline reacted with PhNMeCHO to give the formylquinoline I which on Wittig reaction with Ph<sub>3</sub>P+CH<sub>2</sub>OMe Cl<sup>-</sup> followed by acid hydrolysis gave quinolinylacetaldehyde II. Cyclization of II with

orthophosphoric acid and P2O5 gave dictamnine (III). Alkaloids ptelein (IV), evolitrine (V), and  $\gamma$ -faragine (VI) were prepared similarly from the corresponding methoxyquinolines.

IT 55934-29-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and cyclization of)  
RN 55934-29-7 CAPLUS  
CN 3-Quinolineacetaldehyde, 1,2-dihydro-4,6-dimethoxy-2-oxo- (CA INDEX NAME)

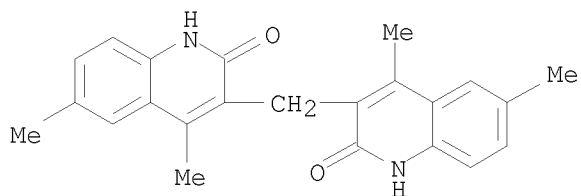


L28 ANSWER 187 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1973:478563 CAPLUS  
DOCUMENT NUMBER: 79:78563  
ORIGINAL REFERENCE NO.: 79:12741a,12744a  
TITLE: Synthesis of methylenebis(2,4-dihydroxyquinolines)  
AUTHOR(S): Trivedi, J. M.; Mehta, C. M.  
CORPORATE SOURCE: Fac. Sci., Maharaja Sayafirao Univ. Baroda, Baroda, India  
SOURCE: Journal of the Indian Chemical Society (1973), 50(3), 231-2  
CODEN: JICSAH; ISSN: 0019-4522  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI For diagram(s), see printed CA Issue.  
AB Methylenebis[quinolinediols] (I, R-R3 = H; R1, R3 = Cl, Me, R, R2, = H; R1, R2 = Me, R, R3 = H; RR1, R2R3 = benzo) were prepared Thus, NCCH2CONHPh was treated with HOCH2SO2Na in MeOH to give CH2[CH(CN)CONHPh]2 which on heating with polyphosphoric acid gave I (R-R3 = H).  
IT 43015-59-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 43015-59-4 CAPLUS  
CN 2(1H)-Quinolinone, 3,3'-methylenebis[4-hydroxy-6-methyl- (CA INDEX NAME)

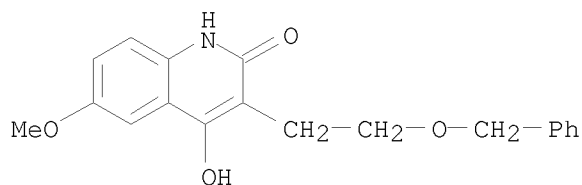


L28 ANSWER 188 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1973:477633 CAPLUS  
DOCUMENT NUMBER: 79:77633  
ORIGINAL REFERENCE NO.: 79:12593a,12596a  
TITLE: Absorption spectra of acetoacetaryl amides, hydroxyquinolines, and their methylene bis-derivatives

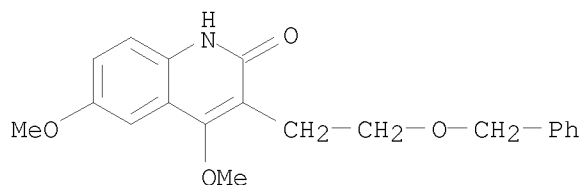
AUTHOR(S): Patel, G. H.; Mehta, C. M.; Vaidya, B. K.  
 CORPORATE SOURCE: Chem. Dep., Maharaja Sayajirao Univ. Baroda, Baroda, India  
 SOURCE: Journal of the Indian Chemical Society (1973), 50(3), 184-7  
 CODEN: JICSAH; ISSN: 0019-4522  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB The UV spectra of N-aryl acetoacetamides, MeCOCH<sub>2</sub>CONHR (I, R = aryl) and substituted 2-hydroxyquinolines (II) were compared resp. with their  $\alpha,\alpha'$ -methylene-(III) and 3,3'-methylene-(IV) bis-analogs. The UV spectra of III and IV showed a hyperchromic effect with respect to I and II. I studied included (R given): Ph, 2-MeC<sub>6</sub>H<sub>4</sub>, 1-naphthyl. II studied included (R, R<sub>1</sub> and R<sub>2</sub> given): 4-Me, H, H; 4-Me, 6-Me, H; and 4-Me, 6-Me, 8-Me.  
 IT 42414-31-3  
 RL: PRP (Properties)  
 (UV spectra of, effect of methylene on)  
 RN 42414-31-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3,3'-methylenebis[4,6-dimethyl- (CA INDEX NAME)



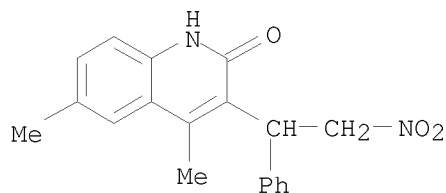
L28 ANSWER 189 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1973:124782 CAPLUS  
 DOCUMENT NUMBER: 78:124782  
 ORIGINAL REFERENCE NO.: 78:20059a,20062a  
 TITLE: New syntheses of maculosidine and pteleine  
 AUTHOR(S): Sekiba, Tetsuya  
 CORPORATE SOURCE: Fac. Chem. Eng., Toyama Tech. Coll., Toyama, Japan  
 SOURCE: Bulletin of the Chemical Society of Japan (1973), 46(2), 577-80  
 CODEN: BCSJA8; ISSN: 0009-2673  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB 2,3-Dihydromaculosidine and 2,3-dihydropteleine were obtained from 2,4-dimethoxy- and 4-methoxy-aniline by condensation with diethyl  $\beta$ -benzyloxyethylmalonate, followed by methylation and subsequent cyclodebenzylation with polyphosphoric acid. The dehydrogenation of the dihydro compds. with 2,3-dichloro-5,6- dicyanobenzoquinone gave maculosidine (I) and pteleine (II) in relatively high yields. Similarly, evolitrine (III) and  $\gamma$ -fagarine (IV) were also prepared  
 IT 41478-42-6P 41478-47-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 41478-42-6 CAPLUS  
 CN 2(1H)-Quinolinone, 4-hydroxy-6-methoxy-3-[2-(phenylmethoxy)ethyl]- (CA INDEX NAME)



RN 41478-47-1 CAPLUS  
 CN 2(1H)-Quinolinone, 4,6-dimethoxy-3-[2-(phenylmethoxy)ethyl]- (CA INDEX NAME)

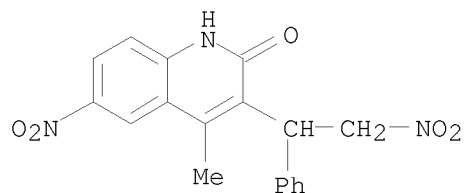


L28 ANSWER 190 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1972:551840 CAPLUS  
 DOCUMENT NUMBER: 77:151840  
 ORIGINAL REFERENCE NO.: 77:24959a,24962a  
 TITLE: Adducts from acetoacetanilides and 2-nitrostyrenes and their cyclization  
 AUTHOR(S): Ali, Mohamed I.; Abou-State, M. Amine; Hassan, Nabil M.  
 CORPORATE SOURCE: Fac. Sci., Univ. Cairo, Giza, Egypt  
 SOURCE: Indian Journal of Chemistry (1972), 10(4), 358-60  
 CODEN: IJOCAP; ISSN: 0019-5103  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB Fifteen RC6H4CH(CH2NO2)CHAcCONHC6H4R1 [I, R = H, p-MeO, 3,4-(CH2O2), R1 = H, p-Me, halo, CO2H, NO2, p-MeO] were prepared from AcCH2CONHC6H4R1 with RC6H4CH:CHNO2 in NaOEt-EtOH or Et3N-C6H6. I were cyclized with H2SO4-H3PO4 to give 35-54% quinolones (II), not indene derivs. (III).  
 IT 38068-55-2P 38070-84-7P 38070-85-8P  
 38070-87-0P 38070-88-1P 38070-90-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 38068-55-2 CAPLUS  
 CN 2(1H)-Quinolinone, 4,6-dimethyl-3-(2-nitro-1-phenylethyl)- (CA INDEX NAME)



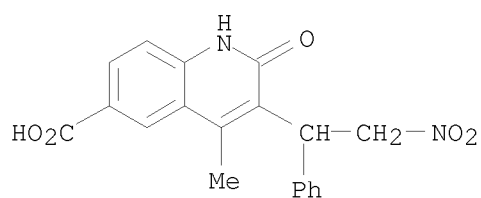
RN 38070-84-7 CAPLUS

CN 2(1H)-Quinolinone, 4-methyl-6-nitro-3-(2-nitro-1-phenylethyl)- (CA INDEX NAME)



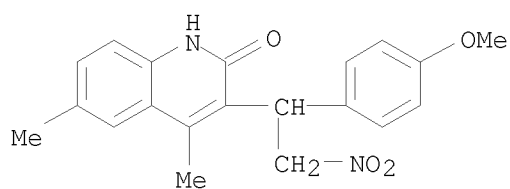
RN 38070-85-8 CAPLUS

CN 6-Quinolinecarboxylic acid, 1,2-dihydro-4-methyl-3-(2-nitro-1-phenylethyl)-2-oxo- (CA INDEX NAME)



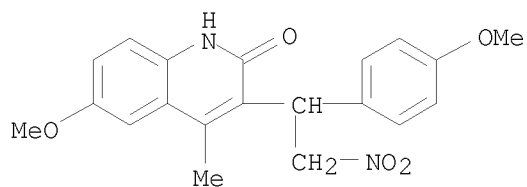
RN 38070-87-0 CAPLUS

CN 2(1H)-Quinolinone, 3-[1-(4-methoxyphenyl)-2-nitroethyl]-4,6-dimethyl- (CA INDEX NAME)



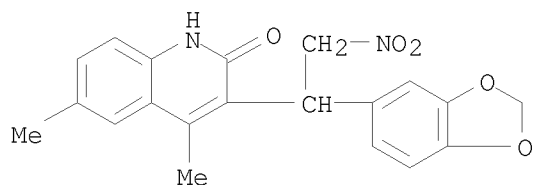
RN 38070-88-1 CAPLUS

CN 2(1H)-Quinolinone, 6-methoxy-3-[1-(4-methoxyphenyl)-2-nitroethyl]-4-methyl- (CA INDEX NAME)

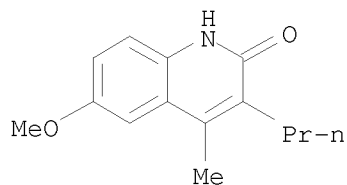


RN 38070-90-5 CAPLUS

CN 2(1H)-Quinolinone, 3-[1-(1,3-benzodioxol-5-yl)-2-nitroethyl]-4,6-dimethyl- (CA INDEX NAME)



L28 ANSWER 191 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1972:501419 CAPLUS  
 DOCUMENT NUMBER: 77:101419  
 ORIGINAL REFERENCE NO.: 77:16715a,16718a  
 TITLE: Synthesis of quinoline derivatives. III. Synthesis of furoquinolines  
 AUTHOR(S): Chudgar, R. J.; Trivedi, K. N.  
 CORPORATE SOURCE: Dep. Chem., M. S. Univ. Baroda, Baroda, India  
 SOURCE: Journal of the Indian Chemical Society (1972), 49(5), 513-18  
 CODEN: JICSAH; ISSN: 0019-4522  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB 2-Methyl-3-allyl-4-quinolinol on ozonolysis followed by hydrogenation gave 2-methyl-3-formylmethyl-4-quinolinol, which on cyclization with polyphosphoric acid gave 4-methylfuro[3,2-c]quinoline I (R = R1 = H). Similarly 2,8-dimethyl- and 6-methoxy-2-methyl-3-allyl-4-quinolinol gave 4,6-dimethyl- and 8-methoxy-4-methylfuro[3,2-c]quinoline (I, R = H, R1 = Me; R = OMe, R1 = H), resp. Several substituted  $\alpha$ -allylacetoacetaryl-amides (II) were cyclized with H2SO4 to give 2,3-dihydro-2,4-dimethylfuro-[2,3-b]quinolines (III, R= 6-MeO, benzo[h], 5,8-dimethyl, 6-Cl, 8-Me). II hydrogenated on Pd/C gave  $\alpha$ -propylacetoacetaryl-amides which underwent cyclization with H2SO4 to give 4-methyl-3-propylcarbostyryl derivs.  
 IT 36797-23-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 36797-23-6 CAPLUS  
 CN 2(1H)-Quinolinone, 6-methoxy-4-methyl-3-propyl- (CA INDEX NAME)



L28 ANSWER 192 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1972:434387 CAPLUS  
 DOCUMENT NUMBER: 77:34387  
 ORIGINAL REFERENCE NO.: 77:5727a,5730a  
 TITLE: Synthesis of quinoline derivatives. VI. Synthesis of pyranoquinolines and quinolinolactones  
 AUTHOR(S): Chudgar, R. J.; Trivedi, K. N.  
 CORPORATE SOURCE: Fac. Sci., Maharaja Sayajirao Univ. Baroda, Baroda, India

SOURCE: Journal of the Indian Chemical Society (1972), 49(1), 41-7  
 CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

LANGUAGE: English

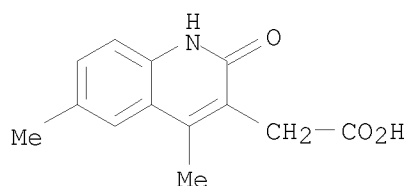
GI For diagram(s), see printed CA Issue.

AB The Perkin reaction of substituted 3-formyl-4-hydroxyquinolines with Ac<sub>2</sub>O and Et<sub>3</sub>N gave pyrano [3,2-c] quinoline (I, R<sub>1</sub> = R<sub>3</sub> = H, R<sub>2</sub> = Me; R<sub>1</sub> = H, R<sub>2</sub> = R<sub>3</sub> = Me). Similarly, 3-formyl-4-hydroxyquinolines, Ac<sub>2</sub>O, Et<sub>3</sub>N, and PhCH<sub>2</sub>CO<sub>2</sub>H gave I (R<sub>1</sub> = Ph, R<sub>2</sub> = Me, R<sub>3</sub> = H; R<sub>1</sub> = Ph, R<sub>2</sub> = R<sub>3</sub> = Me). Condensation of the Na salt of ArNHCOCH<sub>2</sub>COMe (II, Ar = o-MeC<sub>6</sub>H<sub>4</sub>, 2,4-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, α-naphthyl, p-MeC<sub>6</sub>H<sub>4</sub>, 2,5-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>) with BrCH<sub>2</sub>CO<sub>2</sub>Et, followed by H<sub>2</sub>SO<sub>4</sub> cyclization, gave lactones (III, R<sub>1</sub> = R<sub>2</sub> = R<sub>3</sub> = H, R<sub>4</sub> = Me; R<sub>1</sub> = R<sub>3</sub> = H, R<sub>2</sub> = R<sub>4</sub> = Me; R<sub>1</sub> = R<sub>2</sub> = H, R<sub>3</sub>R<sub>4</sub> = 7,8-benzo; R<sub>1</sub> = R<sub>4</sub> = Me, R<sub>2</sub> = R<sub>3</sub> = H; R<sub>1</sub> = R<sub>3</sub> = R<sub>4</sub> = H, R<sub>2</sub> = Me). Similarly, reacting II (Ar = Ph, o-MeC<sub>6</sub>H<sub>4</sub>, p-MeC<sub>6</sub>H<sub>4</sub>) with Na and Br(CH<sub>2</sub>)<sub>2</sub>CO<sub>2</sub>Et gave ArNHCOCH(CH<sub>2</sub>)<sub>2</sub>CO<sub>2</sub>Et, which were cyclized to 3-quinolinepropionic acids (IV, R = CO<sub>2</sub>H). Treating IV (R = CO<sub>2</sub>H, R<sub>1</sub> = H, Me) with SOCl<sub>2</sub>, followed by AlCl<sub>3</sub> in C<sub>6</sub>H<sub>6</sub>, gave IV (R = Bz, R<sub>1</sub> = H, Me).

IT 36796-84-6P 36796-92-6P 36796-94-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

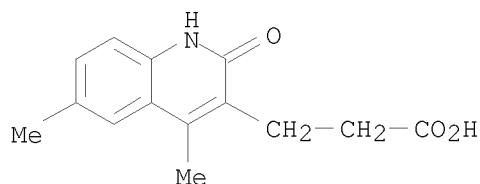
RN 36796-84-6 CAPLUS

CN 3-Quinolineacetic acid, 1,2-dihydro-4,6-dimethyl-2-oxo- (CA INDEX NAME)



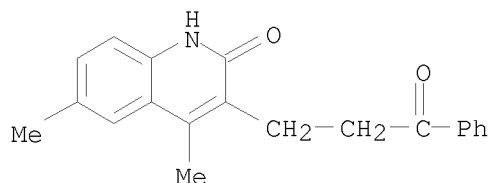
RN 36796-92-6 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2-dihydro-4,6-dimethyl-2-oxo- (CA INDEX NAME)

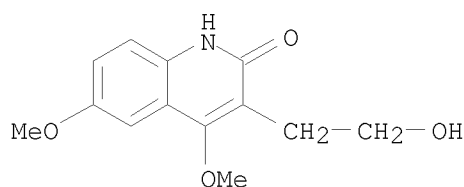


RN 36796-94-8 CAPLUS

CN 2(1H)-Quinolinone, 4,6-dimethyl-3-(3-oxo-3-phenylpropyl)- (CA INDEX NAME)



L28 ANSWER 193 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1971:420723 CAPLUS  
 DOCUMENT NUMBER: 75:20723  
 ORIGINAL REFERENCE NO.: 75:3323a,3326a  
 TITLE: Synthetic application of lithiation reactions. IV. Novel synthesis of linear furoquinoline alkaloids and a synthesis of edulitine  
 AUTHOR(S): Narasimhan, N. S.; Paradkar, M. V.; Alurkar, R. H.  
 CORPORATE SOURCE: Dep. Chem., Niv. Poona, Poona, India  
 SOURCE: Tetrahedron (1971), 27(6), 1351-6  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 75:20723  
 GI For diagram(s), see printed CA Issue.  
 AB A new synthesis of 2,3-dihydrofuro[2,3-b]quinolines by successive treatment of 2-ethoxyquinoline with BuLi, BrCH<sub>2</sub>CH:CH<sub>2</sub>, and HBr, is described and its applicability to obtain the linear furoquinoline alkaloids dictamine (I), pteleine (II), and dihydro-γ-fagarine (III) are illustrated. A synthesis of edulitine (IV) is also achieved by 5% HCl hydrolysis of 2,4,8-trimethoxyquinoline.  
 IT 32499-71-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 32499-71-1 CAPLUS  
 CN Carbostyryl, 3-(2-hydroxyethyl)-4,6-dimethoxy- (8CI) (CA INDEX NAME)



L28 ANSWER 194 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1971:76288 CAPLUS  
 DOCUMENT NUMBER: 74:76288  
 ORIGINAL REFERENCE NO.: 74:12375a,12378a  
 TITLE: Heterocyclic quinones. XI. 2-Quinolonequinones  
 AUTHOR(S): Karpova, N. B.; Tsizin, Yu. S.  
 CORPORATE SOURCE: Inst. Med. Parazitol. Trop. Med. im. Martsinovskogo, Moscow, USSR  
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1970), (10), 1376-80  
 CODEN: KGSSAQ; ISSN: 0132-6244  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 GI For diagram(s), see printed CA Issue.  
 AB The rate-determining step in the oxidation of 6-hydroxy-2-quinolones was the C-5 hydroxylation. I (R<sub>1</sub> = Bu, R<sub>2</sub> = OH, R<sub>3</sub> = R<sub>5</sub> = H, R<sub>4</sub> = OMe), 48% HBr, and AcOH was refluxed 6 hr to give 88.5% I (R<sub>1</sub> = Bu, R<sub>2</sub> = R<sub>4</sub> = OH, R<sub>3</sub> = R<sub>5</sub> = H) (II). III (R<sub>1</sub> = R<sub>3</sub> = H, R<sub>2</sub> = Me) (IV) and 2% aqueous N<sub>2</sub>H<sub>4</sub>·H<sub>2</sub>O heated 10 min gave 80% I (R<sub>1</sub> = R<sub>5</sub> = H, R<sub>2</sub> = Me, R<sub>3</sub> = R<sub>4</sub> = OH). Morpholine and IV in MeOH (N atmospheric) kept 30 min gave 93% I (R<sub>1</sub> = H, R<sub>2</sub> = Me, R<sub>3</sub> = R<sub>4</sub> = OH, R<sub>5</sub> = morpholino). Similarly, 69% I (R<sub>1</sub> = Bu, R<sub>2</sub> = Cl, R<sub>3</sub> = R<sub>4</sub> = OH, R<sub>5</sub> = morpholino).



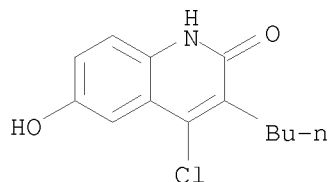
= morpholino) was prepared I (R1 = R3 = R5 = H, R2 = Me, R4 = OH) was treated with Cu(OAc)2 and piperidine in MeOH 300 min under O to give 68% III (R1 = H, R2 = Me, R3 = piperidino). The other I were similarly oxidized (using piperidine or morpholine) to 8 corresponding III in 59-92% yield. Treatment of III with o-(H2N)2C6H4 gave 9 corresponding V.

IT 30722-01-1P 30722-02-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

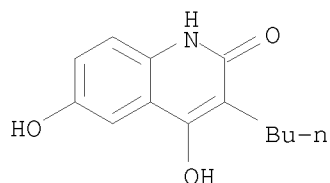
RN 30722-01-1 CAPLUS

CN Carbostyryl, 3-butyl-4-chloro-6-hydroxy- (8CI) (CA INDEX NAME)



RN 30722-02-2 CAPLUS

CN Carbostyryl, 3-butyl-4,6-dihydroxy- (8CI) (CA INDEX NAME)



L28 ANSWER 195 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1970:445465 CAPLUS

DOCUMENT NUMBER: 73:45465

ORIGINAL REFERENCE NO.: 73:7503a,7506a

TITLE: Benzodiazines. XII. Quinoxalones containing methyl groups on the benzene ring

AUTHOR(S): Koshel, N. G.; Postovskii, I. Ya.

CORPORATE SOURCE: Ural. Politekh. Inst. im. Kirova, Sverdlovsk, USSR

SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1970), (5), 684-6

CODEN: KGSSAQ; ISSN: 0132-6244

DOCUMENT TYPE: Journal

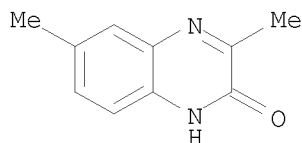
LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.

AB A mixture of 2.07 g 4,5-diamino-o-xylene, 1.5 g ClCH2CO2H, and 1.2 g solid NaOH was triturated, transferred to a flask, and slightly heated to start the reaction. The exothermic reaction subsided in 10 min, to give a solid mass, which was worked up to give 1.6 g 6,7-dimethyltetrahydro-2-quinoxalone, m. 173-5°. This heated 1 hr with 10 ml 2N NaOH and 1.5 ml 30% H2O2, and acidified with 2N HCl to pH 4 gave 1.3 g 6,7-dimethyl-2(3H)-quinoxalone (I) (R = R1 = Me, R2 = H), m. 291-2° (sublimation). Similarly prepared were I (R = R1 = R2 = H) and I (R = Me, R1 = R2 = H) from the corresponding o-phenylenediamines. To 13.3 g 3,4-diaminotoluene in 20 ml hot H2O was added at 85-90° a solution of 11.4 g acetylenedicarboxylic acid (II) in 50 ml H2O and the mixture refluxed 30 min to give 12.5 g I (R = R2 = Me, R1 = H), and 0.6 g I (R = H, R1 = R2 = Me), m. 238-9° (sublimation). An equivalent amount II in 30 ml H2O

added to 13.8 g 4,5-diamino-o-xylene in 400 ml hot H<sub>2</sub>O at 80-5°, and the mixture refluxed 30 min gave 15 g I (R = R<sub>1</sub> = R<sub>2</sub> = Me), m. 278-9°. Similarly prepared was I (R = R<sub>1</sub> = H, R<sub>2</sub> = Me). The effect of introduction of Me groups in I on the ir spectra was discussed.

IT 28082-84-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 28082-84-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,6-dimethyl- (CA INDEX NAME)



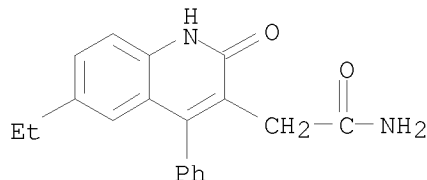
L28 ANSWER 196 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1970:414717 CAPLUS  
 DOCUMENT NUMBER: 73:14717  
 ORIGINAL REFERENCE NO.: 73:2453a,2456a  
 TITLE: Depressant 1,2-dihydro-2-oxo-4-phenyl-3-quinolineacetamides  
 INVENTOR(S): Wei, Peter H. L.; Bell, Stanley C.  
 PATENT ASSIGNEE(S): American Home Products Corp.  
 SOURCE: U.S., 2 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3509156	A	19700428	US 1967-689002	19671208
PRIORITY APPLN. INFO.:			US 1967-689002	A 19671208

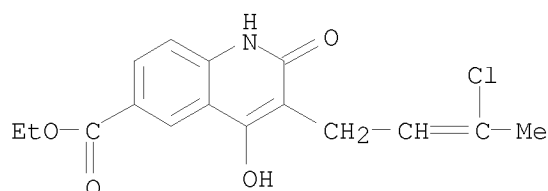
GI For diagram(s), see printed CA Issue.

AB I are prepared for use as central nervous system depressants. Thus, 31.2 g KCN in 50 ml H<sub>2</sub>O was added to 129 g 2'-benzoyl-3',4-dichloropropionanilide in 1 l. EtOH and the mixture refluxed 18 hr to give 5.2 g I (R = Cl), m. 315-20°. I (R = Et) was also prepared. An i.p. injection of the compds. into mice at doses of 12.7, 40, 127, and 400 mg/kg induced decreased motor activity and sedative ataxic effects at 400 mg/kg, anticonvulsant effects at 127 mg/kg and no deaths.

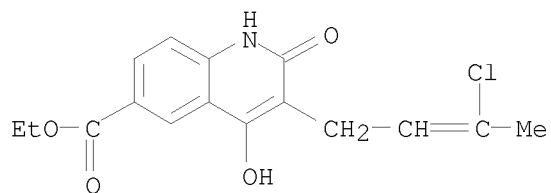
IT 29400-67-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 29400-67-7 CAPLUS  
 CN 3-Quinolineacetamide, 6-ethyl-1,2-dihydro-2-oxo-4-phenyl- (CA INDEX NAME)



L28 ANSWER 197 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1970:43388 CAPLUS  
 DOCUMENT NUMBER: 72:43388  
 ORIGINAL REFERENCE NO.: 72:7951a,7954a  
 TITLE: New derivatives of 2,4-dihydroxyquinoline. III.  
 2,4-Dihydroxy-3-( $\gamma$ -chlorocrotyl)-6-  
 ethoxycarbonylquinoline and some of its reactions  
 AUTHOR(S): Gyul'budagyan, L. V.; Grigoryan, E. T.  
 CORPORATE SOURCE: Erevan. Gos. Univ., Erevan, USSR  
 SOURCE: Armyanskii Khimicheskii Zhurnal (1969), 22(10), 936-9  
 CODEN: AYKZAN; ISSN: 0515-9628  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 GI For diagram(s), see printed CA Issue.  
 AB Derivs. of 6-quinolinecarboxylic acid were prepared A mixture of 49.7 g  
 3-chloro-2-butenyl malonate and 33 g Et p-aminobenzoate was added slowly  
 at 150° to 100 ml ligroine, and the temperature gradually raise d (1.5  
 hr) to 240° to yield 66.8% Et 2,4-dihydroxy-3-(3-chloro-2-butenyl)  
 quinoline-6-carboxylate (I), m. 177-8°; picrate m. 101-2°.  
 Saponification of I gave 87% corresponding acid (II), m. 216° (50% EtOH);  
 picrate m. 168°. Treatment of I and II with POCl<sub>3</sub> yielded 73% Et  
 2,4-dichloro-3-(3-chloro-2-butenyl)quinoline-6-carboxylate, m. 103°  
 (picrate m. 73°), and 69% corresponding acid, m. 135°  
 (picrate m. 105°). A mixture of 1.6 g I and 10 ml H<sub>2</sub>SO<sub>4</sub> was heated  
 at 50° to yield 67.3% 2,4-dihydroxy-3-acetonyl-methylquinoline-6-  
 carboxylic acid, m. 320°; semicarbazone m. 229°.  
 IT 25893-42-9P 25893-43-0P 25893-44-1P  
 25893-48-5P 25893-49-6P 27830-52-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 25893-42-9 CAPLUS  
 CN 6-Quinolinecarboxylic acid, 3-(3-chloro-2-butenyl)-2,4-dihydroxy-, ethyl  
 ester (8CI) (CA INDEX NAME)



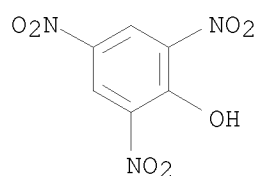
RN 25893-43-0 CAPLUS  
 CN 6-Quinolinecarboxylic acid, 3-(3-chloro-2-butenyl)-2,4-dihydroxy-, ethyl  
 ester, monopicrate (8CI) (CA INDEX NAME)  
 CM 1  
 CRN 25893-42-9  
 CMF C16 H16 Cl N O4



CM 2

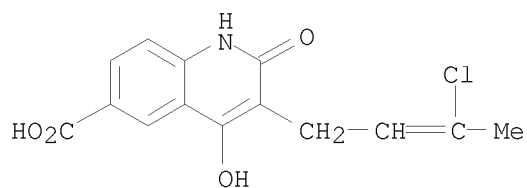
CRN 88-89-1

CMF C6 H3 N3 O7



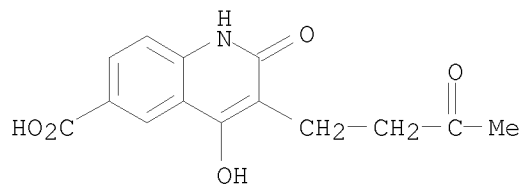
RN 25893-44-1 CAPLUS

CN 6-Quinolinecarboxylic acid, 3-(3-chloro-2-butenyl)-2,4-dihydroxy- (8CI)  
(CA INDEX NAME)



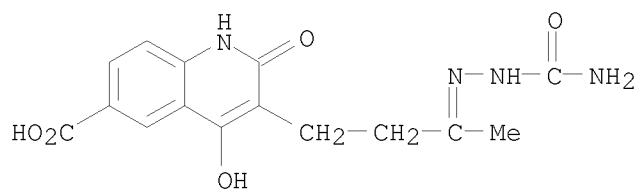
RN 25893-48-5 CAPLUS

CN 6-Quinolinecarboxylic acid, 2,4-dihydroxy-3-(3-oxobutyl)- (8CI) (CA INDEX NAME)



RN 25893-49-6 CAPLUS

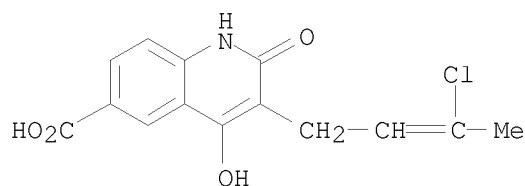
CN 6-Quinolinecarboxylic acid, 2,4-dihydroxy-3-(3-oxobutyl)-, 3-semicarbazone (8CI) (CA INDEX NAME)



RN 27830-52-0 CAPLUS  
 CN 6-Quinolinecarboxylic acid, 3-(3-chloro-2-butenyl)-2,4-dihydroxy-,  
 monopicrate (8CI) (CA INDEX NAME)

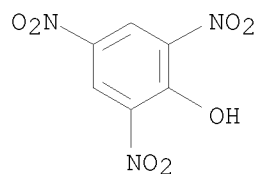
CM 1

CRN 25893-44-1  
 CMF C14 H12 Cl N O4



CM 2

CRN 88-89-1  
 CMF C6 H3 N3 O7



L28 ANSWER 198 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1969:438908 CAPLUS  
 DOCUMENT NUMBER: 71:38908  
 ORIGINAL REFERENCE NO.: 71:7175a, 7178a  
 TITLE: Synthesis and antimicrobial action of  
 $\alpha$ -[2-(5-nitro-2-furyl)vinyl]quinoxaline and its  
 derivatives  
 AUTHOR(S): Saldabols, N.; Alekseeva, L. N.; Brizga, B.; Medne,  
 K.; Kruzmetra, L.; Zile, A.  
 CORPORATE SOURCE: Inst. Org. Sin., Riga, USSR  
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1969), 3(3), 9-13  
 CODEN: KHFZAN; ISSN: 0023-1134  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 GI For diagram(s), see printed CA Issue.  
 AB 2-Furfurylideneacetone (34 g.) was added to a solution of 32.25 g. selenious  
 acid in 150 ml. dioxane and 2.5 ml. H<sub>2</sub>O, boiled for 5 hrs.

o-Phenylenediamine (27 g.) was added to the filtrate containing 2-(2-furylvinyl)glyoxal, 250 ml. H<sub>2</sub>O was added, and on workup yielded 2-(2-furylvinyl)quinoxaline (I), m. 90°. I (16% yield) was also prepared from 14.4 g. 2-methylquinoxaline, 9.6 g. furfural, and 20 ml. Ac<sub>2</sub>O (II) heated in H<sub>2</sub>O bath 3 hrs. and diluted with 100 ml. H<sub>2</sub>O. 2-Methylquinoxaline (2.86 g.), 5-nitro-2-furfural, 10 ml. II, and 10 ml. HOAc (III) boiled 3 hrs. and the mixture worked up yielded 68% 2-[2-(5-nitro-2-furyl)vinyl]quinoxaline (IV), m. 225-6°. 2,3-Dimethylquinoxaline (V) (1.58 g.), 1.92 g. furfural, and 10 ml. III boiled for 2 hrs. yielded 60% 2,3-bis[2-(2-furyl)-vinyl]quinoxaline, m. 165-8°. 2,3-Bis-[2-(5-nitro-2-furyl)vinyl]quinoxaline, m. 315-20°, was prepared in 49% yield by 2 hrs. boiling of 3.16 g. V, 5.34 g. 5-nitrofurfural, and 20 ml. III. 3-Methyl-2-[2-(5-nitro-2-furyl)vinyl]quinoxaline (VI), m. 228°, was prepared in 59% yield analogously to IV. 2-Furfurylidenepyruvic acid Na salt (18.8 g.), 300 ml. alc., 20 ml. HOAc, and 10.8 g. o-phenylenediamine boiled for 2 hrs. yielded 54% 3-[2-(2-furyl)-vinyl]-2-quinoxalinone (VII), m. 245-50°. 3-[2-(5-Nitro-2-furyl)vinyl]-2-quinoxalinone (VIII), m. 300°, was prepared in 45% yield from 3.2 g. 3-methyl-2-quinoxalinone, 2.82 g. 5-nitrofurfural, and 20 ml. III boiled 4 hrs. Alternately, 2.38 g. finely ground VII added to a nitrating mixture of 50 ml. concentrated H<sub>2</sub>SO<sub>4</sub>

and

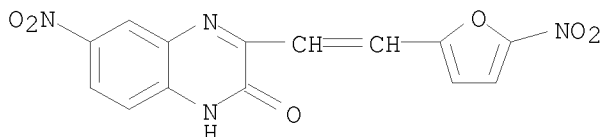
10 millimoles 70% HNO<sub>3</sub> during strong mixing for 30 min. poured on 200 g. ice with H<sub>2</sub>O, yielded 100% VIII, m. 305°. 6-Nitro-3-[2-(5-nitro-2-furyl)vinyl]-2-quinoxalinone was prepared from 1.41 g. 5-nitrofurfural, 2.05 g. 3-methyl-6-nitro-2-quinoxalinone, 10 ml. II, and 5 ml. III heated 3 hrs. on a boiling H<sub>2</sub>O bath with 40% yield, m. 300°; or from 10 millimoles VII nitrated with 25 milli-moles 70% HNO<sub>3</sub> as in the synthesis of VIII in 89% yield, m. 296-300°. The tuberculostatic activity was relatively high and the fungistatic activity was relatively low.

IT 22746-34-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 22746-34-5 CAPLUS

CN 2(1H)-Quinoxalinone, 6-nitro-3-[2-(5-nitro-2-furyl)vinyl]- (8CI) (CA  
INDEX NAME)



L28 ANSWER 199 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1969:88007 CAPLUS

DOCUMENT NUMBER: 70:88007

ORIGINAL REFERENCE NO.: 70:16457a,16460a

TITLE: Mass spectra of the furoquinol-4-one alkaloid  
acrophylline and quinol-2-ones related to  
hexahydroacrophylline

AUTHOR(S): Lahey, F. N.; Lauder, Ian; McCamish, M.

CORPORATE SOURCE: Univ. Queensland, St. Lucia, Australia

SOURCE: Australian Journal of Chemistry (1969), 22(2), 431-45  
CODEN: AJCHAS; ISSN: 0004-9425

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The mass spectra of several isofuroquinoline alkaloids  
(N-methylfuroquinol-4-ones) including the new N-prenylfuroquinol-4-one,  
acrophylline, were determined The fragmentation of hexa-hydroacrophylline and

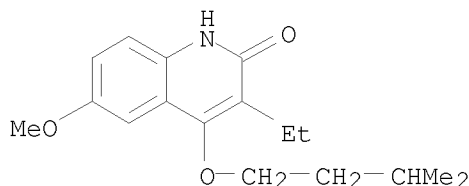
related 3-ethyl-4-hydroxyquinol-2-ones were determined by D and 18O labeling and high-resolution measurements.

IT 22048-14-2 22048-16-4

RL: PRP (Properties)  
(mass spectrum of)

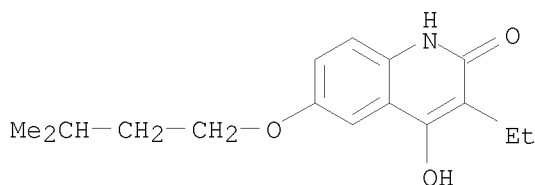
RN 22048-14-2 CAPLUS

CN Carbostyryl, 3-ethyl-4-(isopentyloxy)-6-methoxy- (8CI) (CA INDEX NAME)



RN 22048-16-4 CAPLUS

CN Carbostyryl, 3-ethyl-4-hydroxy-6-(isopentyloxy)- (8CI) (CA INDEX NAME)



L28 ANSWER 200 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1968:496662 CAPLUS

DOCUMENT NUMBER: 69:96662

ORIGINAL REFERENCE NO.: 69:18103a,18106a

TITLE: Reductive formylation of some quinoxaline derivatives

AUTHOR(S): Baxter, I.; Cameron, D. W.

CORPORATE SOURCE: Univ. Chem. Lab., Cambridge, UK

SOURCE: Journal of the Chemical Society [Section] C: Organic  
(1968), (19), 2471-4

CODEN: JSOOAX; ISSN: 0022-4952

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 69:96662

GI For diagram(s), see printed CA Issue.

AB Reduction of quinoxaline and its 2-methyl derivative by HCO<sub>2</sub>H in HCONH<sub>2</sub> yields  
a

mixture of the corresponding N,N'-diformyl-1,2,3,4-tetrahydro compound and 2,2'-biquinoxalinyll. 2-Hydroxyquinoxalines are converted into 4-formyl-1,2,3,4-tetrahydro-2-oxoquinoxalines (I). Condensation products formed from Me<sub>2</sub>CO and some nitroquinoxalines are described.

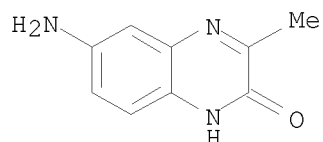
IT 19801-05-9P 19801-07-1P 19801-10-6P

19801-11-7P 19801-12-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

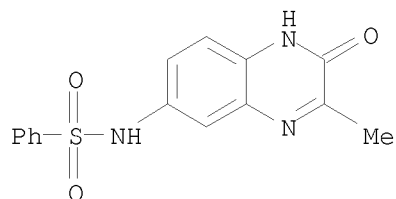
RN 19801-05-9 CAPLUS

CN 2(1H)-Quinoxalinone, 6-amino-3-methyl- (CA INDEX NAME)



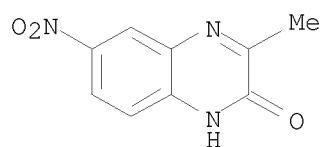
RN 19801-07-1 CAPLUS

CN Benzenesulfonamide, N-(2-hydroxy-3-methyl-6-quinoxaliny)- (8CI) (CA INDEX NAME)



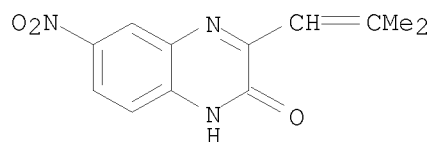
RN 19801-10-6 CAPLUS

CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)



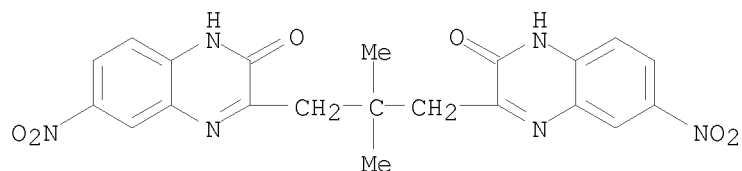
RN 19801-11-7 CAPLUS

CN 2-Quinoxalinol, 3-(2-methylpropenyl)-6-nitro- (8CI) (CA INDEX NAME)



RN 19801-12-8 CAPLUS

CN 2-Quinoxalinol, 3,3'-(2,2-dimethyltrimethylene)bis[6-nitro- (8CI) (CA INDEX NAME)



L28 ANSWER 201 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1968:87119 CAPLUS

DOCUMENT NUMBER: 68:87119

ORIGINAL REFERENCE NO.: 68:16787a,16790a



TITLE: New derivatives of 2,4-dihydroxyquinoline. II.  
 Synthesis of 6-substituted 3-(p-alkoxybenzyl)-3-( $\gamma$ -chlorocrotyl)-2,4-dihydroxyquinolines and their 2,4-dichloro derivatives

AUTHOR(S): Gyul'budagyan, L. V.; Bagratuni, Zh. L.; Grigoryan, V. A.

CORPORATE SOURCE: Erevansk. Gos. Univ., Erevan, USSR

SOURCE: Armyanskii Khimicheskii Zhurnal (1967), 20(7), 522-5  
 CODEN: AYKZAN; ISSN: 0515-9628

DOCUMENT TYPE: Journal

LANGUAGE: Russian

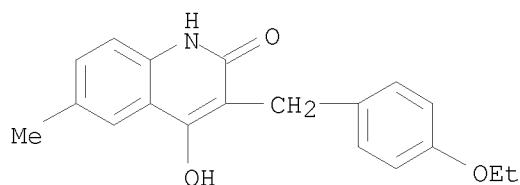
GI For diagram(s), see printed CA Issue.

AB To 50 ml. of mineral oil heated to 150° was added 0.11 mole (EtO2C)2CHCH2C6H4OMe-p and 0.1 mole of PhNH2 and the mixture heated in 1 hr. so that the temperature reached 210-20°, to give I (R3 = R4 = OH, R = p-MeOC6H4CH2 (A), R1 = H), m. 215°. Similarly prepared were I (R3 = R4 = OH) (R1, R2, % yield and m.p. given): A, Cl, 66, 210°; A, Br, 74.4, 246°; p = EtOC6H4CH2 (B), H, 65.1, 220°; B, Me, 51.2, 230°; MeCCl:CHCH2 (C), Cl, 68.5, 217°; C, Br, 57.2, 236°. A mixture of 0.1 mole of the appropriate I and 15 ml. POC13 was heated on the water bath till the evolution of HCl ceased to give I (R3 = R4 = Cl) (R1, R2, % yield, and m.p. given): A, H, 75.6, 87°; A, Cl, 65.7, 84°; A, Br, 70, 126°; B, H, 71.8, 106°; B, Me, 68.9, 112°; C, Cl, 72.9, 148°; C, Br, 68.1, 152°.

IT 17888-10-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 17888-10-7 CAPLUS

CN 2,4-Quinolinediol, 3-(p-ethoxybenzyl)-6-methyl- (8CI) (CA INDEX NAME)



L28 ANSWER 202 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:35813 CAPLUS

DOCUMENT NUMBER: 64:35813

ORIGINAL REFERENCE NO.: 64:6626d-h

TITLE: 3-Dialkylaminoethyl-4-methyl-7-alkoxy(or alkenyloxy)-2-oxo-1,2-dihydroquinolines

PATENT ASSIGNEE(S): Cassella Farbwerke Mainkur A.-G.

SOURCE: 26 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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BE 645998		19641001	BE	
FR M3540			FR	
GB 1042638			GB	
PRIORITY APPLN. INFO.:			DE	19630402

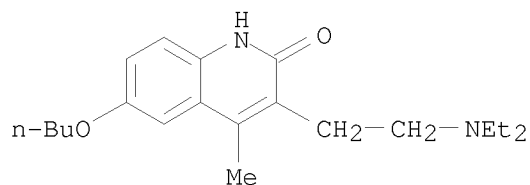
GI For diagram(s), see printed CA Issue.

AB Compds. of the general formulas I and II are prepared and can be used as coronary vasodilators. Thus, a mixture of 27.4 g. 3-( $\beta$ -diethylaminoethyl)-4-methyl-7-hydroxy-2-oxo-1,2-dihydroquinoline, 16 g.  $K_2CO_3$ , and 260 ml.  $HCONMe_2$  is heated 2 hrs. at  $70^\circ$ , 14 g.  $ClCH_2CO_2Et$  added dropwise, and the mixture agitated 9 hrs. at  $70^\circ$  to give 3-( $\beta$ -diethylaminoethyl)-4-methyl-7-ethoxycarbonylmethoxy-2-oxo-1,2-dihydroquinoline-HCl, m.  $222^\circ$ . Similarly prepared are the following I ( $R_2 = Me$ ) ( $R$  or  $NR_2$ ,  $R_1$ ,  $R_3$ ,  $X$ , m.p., and m.p. HCl salt given): Et, H, allyl, H, --,  $233^\circ$  (EtOAc-MeOH); Et, H, Et, H,  $197^\circ$ , --; Et, H, PhCh<sub>2</sub>, H,  $218^\circ$ , --; Et, H, Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, H,  $179^\circ$ , --; Et, H, Bu, H,  $186^\circ$ , --; piperidino, H, EtO<sub>2</sub>CCH<sub>2</sub>, H, --,  $266^\circ$ ; piperidino, H, Bu, H,  $243^\circ$ , --; piperidino, Et, EtO<sub>2</sub>CCH<sub>2</sub>, H, --,  $170^\circ$ ; piperidino, Bu, EtO<sub>2</sub>CCH<sub>2</sub>, H, --,  $167^\circ$ ; Et, H, EtO<sub>2</sub>CCHMe, H, --,  $184^\circ$ ; Et, H, EtO<sub>2</sub>CCH<sub>2</sub>, Cl, --,  $220-2^\circ$ ; Et, H, allyl, Cl, --,  $189^\circ$  (MeOH-H<sub>2</sub>O); Et, H, Bu, Cl --,  $185^\circ$ ; Et, H, EtO<sub>2</sub>CCH<sub>2</sub>, Br,  $143-5^\circ$  (MeOH),  $202-4^\circ$  (decomposition); Et, H, allyl, Br, --,  $200^\circ$ ; Et, H, Bu, Br, --,  $198^\circ$ ; Et, Me, EtO<sub>2</sub>CCH<sub>2</sub>, Br, --,  $196^\circ$ ; piperidino, Bu, EtO<sub>2</sub>CCH<sub>2</sub>, Br, --,  $221^\circ$ ; Et, H, EtO<sub>2</sub>CCHMe, Br, --,  $110-11^\circ$ ; Et, H, EtO<sub>2</sub>CCH<sub>2</sub>, NO<sub>2</sub>,  $240-2^\circ$  (decomposition) (MeOH), --; Et, Me, EtO<sub>2</sub>CCH<sub>2</sub>, Cl, --,  $135^\circ$ ; Et, H, Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, Br, --, --, 2HCl salt m.  $240^\circ$  (decomposition); piperidino, H, EtO<sub>2</sub>CCH<sub>2</sub>, Br, --,  $204^\circ$ ; morpholino, H, EtO<sub>2</sub>CCH<sub>2</sub>, Br, --,  $231^\circ$ ; piperidino, Et, EtO<sub>2</sub>CCH<sub>2</sub>, Br, --,  $206^\circ$ ; Et, Et, EtO<sub>2</sub>CCH<sub>2</sub>, Br, --,  $172^\circ$ ; Et, H, Me, H, --,  $264^\circ$ . Similarly prepared are (m.p. HCl salt given): 3-( $\beta$ -diethylaminopropyl)-4-methyl-7-ethoxycarbonylmethoxy-2-oxo-1,2-dihydroquinoline,  $221-2^\circ$ ; I ( $X = H$ ,  $R = Et$ ,  $R_1 = H$ ,  $R_2 = Ph$ ,  $R_3 = EtO_2CCH_2$ ),  $229^\circ$  (alc.-MeEtCO); II ( $R = Et$ ,  $R_1 = H$ ,  $R_2 = Me$ ,  $R_3 = EtO_2CCH_2$ ,  $X = X_1 = Br$ ) [m.  $177-8^\circ$  (EtOAc)],  $202-3^\circ$ . A mixture of 16 g. m-MeOC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>, 25 g. Ac(Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>)CHCO<sub>2</sub>Et, and 190 g. polyphosphoric acid is agitated 15 min. at  $130-50^\circ$  to give 10 g. I ( $X = R_1 = H$ ,  $R = Et$ ,  $R_2 = Me$ ,  $R_3 = Me$ )-HCl, m.  $264^\circ$ . A solution of 27.4 g. I ( $X = R_1 = H$ ,  $R = Et$ ,  $R_2 = Me$ ,  $R_3 = H$ ) in 274 ml. HOAc is treated with Cl at  $10-20^\circ$  to give I ( $R_1 = R_3 = H$ ,  $R = Et$ ,  $R_2 = Me$ ,  $X = Cl$ )-HCl, m.  $300^\circ$  (decomposition). Also prepared are (m.p. given): I ( $R_1 = R_3 = H$ ,  $R = Et$ ,  $R_2 = Me$ ,  $X = Br$ )-HBr,  $263-5^\circ$  (decomposition); II ( $R_1 = R_3 = H$ ,  $R = Et$ ,  $R_2 = Me$ ,  $X = X_1 = Br$ )-HBr,  $255-7^\circ$  (decomposition); I ( $R_1 = R_3 = H$ ,  $R = Et$ ,  $R_2 = Me$ ,  $X = NO_2$ ) nitrate,  $266-8^\circ$  (decomposition); I ( $R_3 = H$ ,  $R = Et$ ,  $R_1 = R_2 = Me$ ,  $X = Cl$ )-HCl,  $266-8^\circ$  (decomposition) ( $HCONMe_2$ ).

IT 100154-46-9  
(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 100154-46-9 CAPLUS

CN Carbostyryl, bromo-6-butoxy-3-[2-(diethylamino)ethyl]-4-methyl-, hydrochloride (7CI) (CA INDEX NAME)



D1-Br

● HCl

ACCESSION NUMBER: 1964:447764 CAPLUS

DOCUMENT NUMBER: 61:47764

ORIGINAL REFERENCE NO.: 61:8271d-f

TITLE: New derivatives of 2,4-quinolinediol. I. Synthesis of some 3-( $\gamma$ -chlorocrotyl)-2,4-quinolinediols

AUTHOR(S): Gyul'budagyan, L. V.; Grigoryan, V. A.; Pogosyan, A. A.

SOURCE: Izvestiya Akademii Nauk Armyanskoi SSR, Khimicheskie Nauki (1964), 17(2), 223-6  
CODEN: IARKAZ; ISSN: 0367-6846

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.

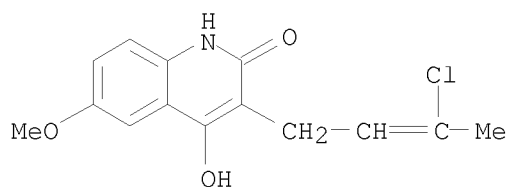
AB Ethyl  $\gamma$ chlorocrotylmalonate (I) (0.11 mole), 0.1 mole aromatic amine, and 50 ml. vaseline oil heated with stirring at 200-20° 1 hr., cooled, and the crystals washed with petr. ether gave 2,4-dihydroxy-3-( $\gamma$ -chlorocrotyl)quinolines and II (R, % yield, and m.p. given): H, 84.6, 197°; 6-Me, 71.4, 194°; 8-Me, 63.8, 179°; OH 6-OMe, 67.4, 203°; 8-OMe, 80.1, 170°. The quinolinediols were crystalline products soluble in alc. and pyridine. I (0.11 mole), 0.05 mole o-tolidine, and 50 ml. vaseline oil, similarly treated as above, gave a crystalline product, which after addition of 200 ml. EtOH and heating gave 9.2 g. 2,4-dihydroxy-3-( $\gamma$ -chlorocrotyl)-6-(3-methyl-4-aminophenyl)-8-methylquinoline, m. 295°. From the alc. solution was separated 8.9 g. 6,6'-bis[2,4-dihydroxy-3-( $\gamma$ -chlorocrotyl)-8-methylquinolyl], m. 206°.

IT 92253-19-5P, 2,4-Quinolinediol, 3-(3-chloro-2-butenyl)-6-methoxy-  
93044-53-2P, 2,4-Quinolinediol, 3-(3-chloro-2-butenyl)-6-methyl-  
RL: PREP (Preparation)

(preparation of)

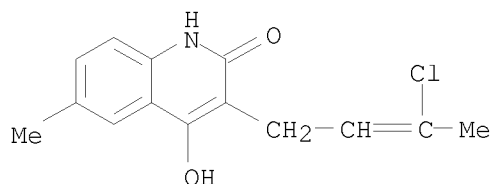
RN 92253-19-5 CAPLUS

CN 2,4-Quinolinediol, 3-(3-chloro-2-butenyl)-6-methoxy- (7CI) (CA INDEX NAME)



RN 93044-53-2 CAPLUS

CN 2,4-Quinolinediol, 3-(3-chloro-2-butenyl)-6-methyl- (7CI) (CA INDEX NAME)



ACCESSION NUMBER: 1963:462385 CAPLUS  
 DOCUMENT NUMBER: 59:62385  
 ORIGINAL REFERENCE NO.: 59:11514c-h,11515a  
 TITLE: Dihydroquinoxal-2-ones  
 INVENTOR(S): Zellner, Hugo; Pailer, Matthias; Pruckmayr, Gerfried  
 PATENT ASSIGNEE(S): Donau-Pharmazie G.m.b.H.  
 SOURCE: 12 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

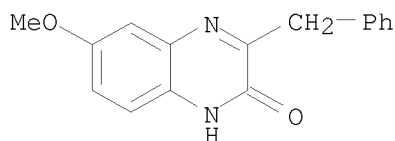
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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AT 228204		19630710	AT	19590703
PRIORITY APPLN. INFO.:			AT	19590703

GI For diagram(s), see printed CA Issue.

AB New dihydroquinoxal-2-ones (I), in which R1, R2, R3, R7, and R8 are H, halogen, alkyl, OH, alkoxy, acyloxy, alkyloxy, NH2, monoalkylamino, dialkylamino, acylamino, NO2, or alkylthio groups, R4 is dialkylaminoalkyl, aminoalkyl, N-alkylpiperidyl or N-alkylmorpholyl, and R5 and R6 are H, alkyl with up to 5 C atoms, OH, acyloxy, alkyloxy, NH2, acylamino, monoalkylamino, or dialkyl amino groups, and the salts thereof are prepared by treating the resp. o-phenylene diamines with suitably substituted phenylpyruvic acids or derivs. thereof to obtain the dihydroquinoxalones, which are then aminoalkylated at the 1-N atom with an amino alc. and subsequently aminated. The compds. obtained may be converted into salts. Thus, there have been prepared: 1-(diethylaminoethyl)-3-benzylidihydroquinoxal-2-one, m. 31°; 1-(diethylaminoethyl)-3-(4-methoxybenzyl)dihydroquinoxal-2-one; 1-(diethylaminoethyl)-3-(3,4-dimethoxybenzyl)dihydroquinoxal-2-one, m. 192°; 1-(diethylaminoethyl)-3-(3,4-methylenedioxybenzyl)dihydroquinoxal-2-one, light yellow oil; 1-(diethylaminoethyl)-3-(3,4-dimethoxybenzyl)-6-chlorodihydroquinoxal-2-one, b0.5 240-6°; 6-chloro-3-(4-methoxybenzyl)-1-diethylaminoethylidihydroquinoxal-2-one, b0.01 210°; 3-(4-nitrobenzyl)-1-diethylaminoethylidihydroquinoxal-2-one, b0.03-0.05 170-5°; 3-(4-dimethylaminobenzyl)-1-diethylaminoethylidihydroquinoxal-2-one, b0.01 200-10°; 6(7)-methoxy-3-(3,4-dimethoxybenzyl)-1-diethylaminoethylidihydroquinoxal-2-one, b0.01 220°; 6(7)-methyl-3-(4-methoxybenzyl)-1-diethylaminoethylidihydroquinoxal-2-one, b0.01 200°; 3-(4-chlorobenzyl)-1-diethylaminoethylidihydroquinoxal-2-one, b0.01 185-90°; 3-(4-methoxybenzyl)dihydroquinoxal-2-one, m. 198°; 3-(3,4-methylenedioxybenzyl)dihydroquinoxal-2-one, m. 220°; 6(7)-methoxy-3-benzylidihydroquinoxal-2-one, 2 isomers, m. 185 and 199°, resp.; 6(7)-methoxy-3-(4-methoxybenzyl)dihydroquinoxal-2-one, m. 190°; 6(7)-chloro-3-(4-methoxybenzyl)dihydroquinoxal-2-one, m. 227-9°; 6(7)-nitro-3-(4-methoxybenzyl)dihydroquinoxal-2-one, m. 192-7°; 6(7)-methoxy-3-(3,4-dimethoxybenzyl)dihydroquinoxal-2-one, m. 171°, 6(7)-methoxy-3-(3,4-methylenedioxybenzyl)dihydroquinoxal-2-one, m. 215°; 6,7-dimethoxy-3-benzylidihydroquinoxal-2-one, m. 275°; 3-(4-ethoxybenzyl)dihydroquinoxal-2-one, m. 196°; 3-(p-chlorobenzyl)dihydroquinoxal-2-one, m. 180° (decomposition); 3-(p-hydroxybenzyl)dihydroquinoxal-2-one, m. 246°; 3-(4-methoxyphenyl)- $\alpha$ -ethylidihydroquinoxal-2-one, m. 205°; 6(7)-methoxy-3-(3,4-dimethoxybenzyl)-1-diethylaminoethylidihydroquinoxal-2-one, b0.01 220°; 3-(4-ethoxybenzyl)-1-diethylaminoethylidihydroquinoxal-2-one, m. 62°; 6(7)-methoxy-3-benzyl-1-diethylaminoethylidihydroquinoxal-2-one, b0.01 204-8°; 3-(4-methoxybenzyl)-1-morpholinoethylidihydroquinoxal-2-one, m. 151°; 6(7)-chloro-3-(4-methoxybenzyl)-1-morpholinoethylidihydroquinoxal-2-one, b0.005 200°;

6(7)-methoxy-3-(3,4-methylenedioxybenzyl)-1-morpholinoethyl-dihydroquinoxal-2-one, m. 201°, b0.01 200-10°; 3-benzyl-1-morpholinoethyl-dihydroquinoxal-2-one, b0.005 203°; 6(7)-chloro-3-(4-methoxybenzyl)-1-diethylaminoethyl-dihydroquinoxal-2-one, b0.01 210°, m. 78-9°; 6,7-dimethoxy-3-benzyl-1-diethylaminoethyl-dihydroquinoxal-2-one, b0.005 230°; 1-piperidinomethyl-3-benzyl-dihydroquinoxal-2-one, m. 211-12°. The compds. are useful as analgesics; they have papaverine- and morphine-like activity.

IT 94066-67-8P, 2(1H)-Quinoxalinone, 3-benzyl-6-methoxy-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 94066-67-8 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-benzyl-6-methoxy- (7CI) (CA INDEX NAME)



L28 ANSWER 205 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:421769 CAPLUS

DOCUMENT NUMBER: 59:21769

ORIGINAL REFERENCE NO.: 59:3920b-d

TITLE: The reaction of diethyl acetylenedicarboxylate with 4-methyl-1,2-diaminobenzene

AUTHOR(S): Iwanami, Yasuo

CORPORATE SOURCE: Sasaki Inst., Tokyo

SOURCE: Nippon Kagaku Zasshi (1962), 83(161), 5

CODEN: NPKZAZ; ISSN: 0369-5387

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

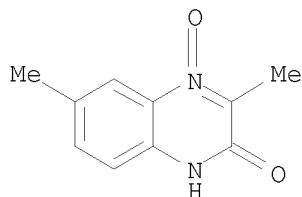
AB EtO2CC.tplbond.CC02Et (8.5 g.) in 10 cc. EtOH treated with 6.1 g. 2,4-(H2N)2C6H3Me in 800 cc. EtOH gave 9.7 g. mixture, m. 173-81°, which was fractionally crystallized from EtOH to give 1.1 g. 7-methyl-2-oxo-3-ethoxycarbonylmethylene-1,2,3,4-tetrahydroquinoxaline (I), m. 196.5-7.5°, sparingly soluble, and 1.35 g. 6-methyl-2-oxo-3-ethoxycarbonylmethylene-1,2,3,4-tetrahydroquinoxaline (II), m. 177-8°. I (1 g.) and 60 cc. 6N HCl was heated 3 hrs. to give CO2 and 0.6 g. 7-methyl-2-oxo-3-methylene-1,2,3,4-tetrahydroquinoxaline (III), m. 236-7°. Similarly, II gave 6-methyl-2-oxo-3-methylene-1,2,3,4-tetrahydroquinoxaline (IV), m. 221-1°. Hydrogenation of III with Raney Ni afforded 3,7-dimethyl-2-oxo-1,2,3,4-tetrahydroquinoxaline (V), m. 157°. 4,2-Me(O2)C6H3NHCHMeCO2H was treated similarly to give V. 5,2-Me(AcNH)C6H3NO2 was hydrogenated and the product treated with MeCHBrCO2Et to give 3,6-dimethyl-2-oxo-1,2,3,4-tetrahydroquinoxaline (VI), m. 253-5°, the results being different from those reported (Marks and Schultz, CA 45, 9546b). Hydrogenation of IV gave VI. Infrared spectra of I, II, III, and IV, mixed m.p. curve of I and II and that of III and IV are given.

IT 90915-48-3P, 2(1H)-Quinoxalinone, 3,6-dimethyl-, 4-oxide

RL: PREP (Preparation)  
 (preparation of)

RN 90915-48-3 CAPLUS

CN 2(1H)-Quinoxalinone, 3,6-dimethyl-, 4-oxide (CA INDEX NAME)



L28 ANSWER 206 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:403525 CAPLUS

DOCUMENT NUMBER: 59:3525

ORIGINAL REFERENCE NO.: 59:626h,627a-d

TITLE: Synthesis of quinoxalone derivatives

AUTHOR(S): Pailer, M.; Pruckmayr, G.; Zellner, H.; Zellner, Gertraud

CORPORATE SOURCE: Univ. Vienna

SOURCE: Monatshefte fuer Chemie (1962), 93, 1005-18

CODEN: MOCMB7; ISSN: 0026-9247

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 59:3525

GI For diagram(s), see printed CA Issue.

AB The synthesis of a series of substituted 3-benzylquinoxal-2-ones is described. These could be expected to possess a similar pharmacol. activity to the analogous benzimidazole derivs. of similar structure. I were prepared either by condensing the corresponding phenylpyruvic acid with N-diethylaminoethyl- or N-morpholinoethyl-o-phenylenediamine, or by first preparing the quinoxalone then alkylating with diethylaminoethyl chloride [or morpholinoethyl (MA) chloride] and sodamide in absolute dioxane or with K<sub>2</sub>CO<sub>3</sub> in absolute xylene. Similarly prepared were II (R, R<sub>1</sub>, m.p. given): H, H, 312°; OMe, H, 267.5-8.5°; H, Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, 99.5-101°. R, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, m.p.; H, H, H, H, H, 196°; OMe, H, H, H, H, 198°; OEt, H, H, H, H, 196°; OCH<sub>2</sub>O, , H, H, H, 220°; H, H, OMe(H), H(OMe), H, 185°; H, H, H(OMe), OMe(H), H, 200°; H, H, OMe, OMe, H, 275°; OH, H, H, H, H, 243-6°; , , , , (decomposition); OMe, OMe, Cl(H), H(Cl), H, 201-2°; OMe, H, Cl(H), H(Cl), H, 220-2°; OMe, H, H(Cl), Cl(H), H, 227-9°; NO<sub>2</sub>, H, H, H, H, 268-9°; Cl, H, H, H, H, 231°; OMe, H, NO<sub>2</sub>(H), H, (NO<sub>2</sub>), H, 192-7°; OMe, H, Me(H), H(Me), H, 202-3°; OMe, H, CO<sub>2</sub>Me(H), H(CO<sub>2</sub>Me), H, 167-8°; OMe, H, benzo, , 264°; H, H, H, H, Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, -, OMe, H, H, H, Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, 69° (HCl salt m. 188°); OMe, OMe, H, H, Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, - (HCl salt m. 192°); OCH<sub>2</sub>O, , H, H, Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, - (HCl salt m. 220°); OEt, H, H, H, Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, 61°; OMe, OMe, Cl(H), H(Cl), Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, -, OMe, H, H, (Cl), Cl(H), Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, 78-9°; Cl, H, H, H, Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, 73-5°; OMe, H, Me(H), H(Me), Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>, 69-70°; H, H, H, H, MA, -, OMe, H, H, H, MA, 151°; Also prepared was III; HCl salt m. 207-10°.

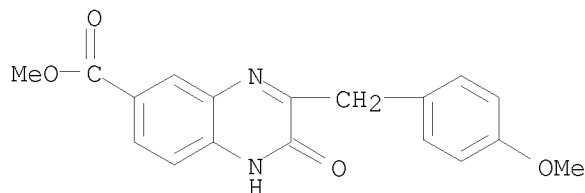
IT 94209-89-9P, 6-Quinoxalinecarboxylic acid, 1,2-dihydro-3-(p-methoxybenzyl)-2-oxo-(?), methyl ester

RL: PREP (Preparation)

(preparation of)

RN 94209-89-9 CAPLUS

CN 6-Quinoxalinecarboxylic acid, 1,2-dihydro-3-(p-methoxybenzyl)-2-oxo-, methyl ester (7CI) (CA INDEX NAME)



L28 ANSWER 207 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:20875 CAPLUS

DOCUMENT NUMBER: 58:20875

ORIGINAL REFERENCE NO.: 58:3463g-h, 3464g-h

TITLE: Furoquinolines. XXII. Synthesis of 4-methyl-2,3-dihydro-[2,3-b]quinoline and its analogs  
 AUTHOR(S): Ohta, Tatsuo; Mori, Yo; Mihashi, Susumu  
 CORPORATE SOURCE: Tokyo Coll. Pharm.  
 SOURCE: Yakugaku Zasshi (1962), 82, 508-11  
 CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

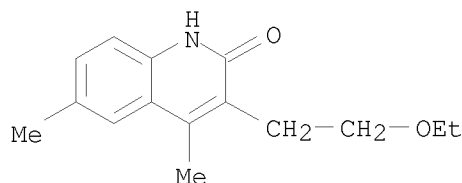
AB cf. CA 56, 2433b. AcCH(CH<sub>2</sub>CH<sub>2</sub>OEt)CO<sub>2</sub>Et (I) (10 g.) on all oil bath at 150° treated dropwise with 2 ml. PhNH<sub>2</sub> and the solution concentrated in vacuo gave 5.2 g. x-RC<sub>6</sub>H<sub>4</sub>NHCOCHAcCH<sub>2</sub>CH<sub>2</sub>OEt (II) (x-R = H) (III), oil. Or, 10 g. I in 65 ml. C<sub>6</sub>H<sub>6</sub> and 1.4 g. Na refluxed 3.5 hrs., the C<sub>6</sub>H<sub>6</sub> removed, the residue in 80 ml. EtOH and 15.3 g. EtOCH<sub>2</sub>CH<sub>2</sub>Br refluxed 1 hr., the solution concentrated, and the residue extracted with Et<sub>2</sub>O gave 8 g. II, oil.

I (5.2 g.) added portionwise to 5.2 g. concentrated H<sub>2</sub>SO<sub>4</sub>, kept overnight at room temperature, heated 5 min. at 60° and the product poured into ice H<sub>2</sub>O gave 2.4 g. 3-(2-ethoxyethyl)-4-methylcarbostyryl (III), m. 142-3° (MeOH). III (1.7 g.) in 54 g. polyphosphoric acid kept 2 hrs. at 100-5° and the product poured into ice H<sub>2</sub>O and made alkaline with NH<sub>4</sub>OH gave 1.23 g. 4-methyl-2,3-dihydrofuro[2,3-b]quinoline (IV), m. 123-3.5°; picrate m. 198-9° Other analogs of II (x-R = 4-Me, 4-MeO, 3-Cl, or 2-MeO) were all oils. Other x-R substituted analogs of III were prepared (x-R, % yield, and m.p. given); 6-Me, 27.8, 170-70.5° 7-MeO, 42.8, 151-1.5° 7-Cl, 40.2, 158-9°; 6-Cl, 10.7, 182-3° Other x-R substituted analogs of IV were prepd, (x-R, % yield, and m.p., and m.p. of picrate given): 6-Me, 86.2, 182°, 197-9° (decomposition); 6-MeO, 70.2, 161-2°, 196-7° (decomposition); 7-Cl, 51.8, 131-2° above 300°; 6-Cl, 40.3, 230-1° above 300°.

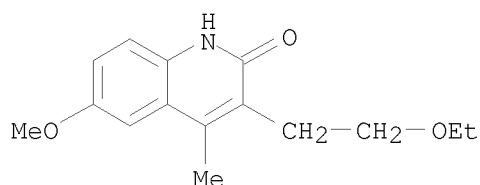
IT 92652-02-3P, Carbostyryl, 3-(2-ethoxyethyl)-4,6-dimethyl-  
 92652-41-0P, Carbostyryl, 3-(2-ethoxyethyl)-6-methoxy-4-methyl-  
 RL: PREP (Preparation)  
 (preparation of)

RN 92652-02-3 CAPLUS

CN Carbostyryl, 3-(2-ethoxyethyl)-4,6-dimethyl- (6CI, 7CI) (CA INDEX NAME)



RN 92652-41-0 CAPLUS  
CN Carbostyryl, 3-(2-ethoxyethyl)-6-methoxy-4-methyl- (6CI, 7CI) (CA INDEX NAME)



L28 ANSWER 208 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1962:53317 CAPLUS

DOCUMENT NUMBER: 56:53317

ORIGINAL REFERENCE NO.: 56:10097e-i,10098a-b

TITLE: Intensities of the carbonyl bands in the infrared spectra of 2- and 4-quinolones

AUTHOR(S): mcCorkindale, N. J.

CORPORATE SOURCE: Univ. Glasgow, UK

SOURCE: Tetrahedron (1961), 14, 223-9

CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

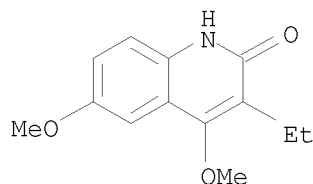
LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB Measurement of the intensities of the CO bands in 65 2-(I, II) or 4-quinolones (III) showed that the high intensities of I and II distinguished them from III. I, II, and III were readily soluble in 1:3 or 1:4 Me<sub>2</sub>SO-CHCl<sub>3</sub> in which the KBr of the cells was virtually insol. Integrated intensities were calculated by the method of Cabana and Sandorfy (CA 54, 17034h). Measurements were made on 6-12 mg. samples in 5 ml. solvent using 0.5-mm. cells. Properties of new compds. are listed [series, R, R' and uncor. m.p. (solvent) given]. I: OH, 8-MeO, 226-7° (alc.); OH, 5,8-(MeO)<sub>2</sub>, 217-18° (alc.); OH, 8-Ph, 233-5° (alc.); OH, 5,6-benzo, 270-5° (AcOH); OH, 8-MeO<sub>2</sub>C, 245° (alc.); OAc, 8-MeO, 180-2° (alc.); OAc, 7-MeO, 223° (dilute alc.); OAc, 5,8-(MeO)<sub>2</sub>, 184-8° (dilute alc.); OAc, 8-Ph, 215-17° (alc.); OAc, 8-MeO<sub>2</sub>C, 171-2° (alc.); OAc, 5,6-benzo, 266-71° (alc.); Cl, H, 222-5° (dilute alc.); Cl, 5,8-(MeO)<sub>2</sub>, 201-4° (alc.); Cl, 8-MeO<sub>2</sub>C, 142.0-2.5° (dilute alc.); Cl, 8-MeO, 206-8° (alc.); OMe, 8-MeO, 116-18° (ligroine, b. 60-80°); OMe, 7-MeO, 152.5-4.0° (C<sub>6</sub>H<sub>6</sub>-ligroine); OMe, 6-MeO, 167-9° (C<sub>6</sub>H<sub>6</sub>-ligroine); OMe, 5,8-(MeO)<sub>2</sub>, 149-50° (C<sub>6</sub>H<sub>6</sub>-ligroine); OMe, 6,8-(MeO)<sub>2</sub>, 130-1° (ligroine) (identical with the hydrogenolysis product of maculosidine); OMe, 8-Ph, 135-6° (ligroine). II: OH, 8-MeO<sub>2</sub>C, 242-3° (dilute alc.); OMe, H, 82.0-3.5° (petr. ether); OMe, 7-MeO, 0.1 mm., 72-4° (petr. ether) (b0.1 160-80°); OMe, 8-MeO<sub>2</sub>C, 119-20° (petr. ether). III: 5,8-dimethoxy-2-methyl-4-quinolone, 216-17° (HCONMe<sub>2</sub>); 3-carbethoxy-8-phenyl-4-quinolone, 245-8° (C<sub>5</sub>H<sub>5</sub>N-alc.); 3-carboxy-5,8-dimethoxy-4-quinolone, 270-1° (Me<sub>2</sub>CO); 8-phenyl-4-quinolone, 203.5-4.5° (dilute alc.); α-ethylmalondi(o-anisidide), 152-4° (alc.). The CO intensities of the 4-quinolones (8.9-25.8 units) were comparable to those found for a group of anilides and to those recorded for some acetamides, benzamides, and acetanilides (11.6-22.5 units). The CO intensities of the 2-quinolones were found at a higher range (33.7-76.7 units). Some applications of the findings in alkaloid chemistry were discussed, including proof that the ring system of maculosidine is linear.



IT 91957-73-2, Carbostyryl, 3-ethyl-4,6-dimethoxy-  
(and its spectrum)  
RN 91957-73-2 CAPLUS  
CN Carbostyryl, 3-ethyl-4,6-dimethoxy- (7CI) (CA INDEX NAME)



L28 ANSWER 209 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1961:144230 CAPLUS

DOCUMENT NUMBER: 55:144230

ORIGINAL REFERENCE NO.: 55:27333d-i,27334a-f

TITLE: Preparation of 3-methyl-6- and -7-carboxy-2-  
quinoxalinones

AUTHOR(S): Blackburn, Wm.; Danzig, Morris; Hubinger, Henry;  
Soisson, Donald; Schultz, Harry P.

CORPORATE SOURCE: Univ. of Miami, Coral Gables, FL

SOURCE: Journal of Organic Chemistry (1961), 26, 2805-9  
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

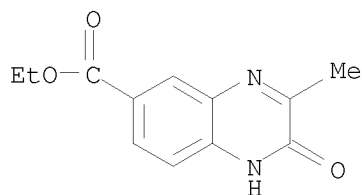
AB 3-Methyl-6-carboxy-2-quinoxalinone (I) and 3-methyl-7-carboxy-2-  
quinoxalinone (II), their esters, and dihydro derivs. were prepared by  
unequivocal procedures. The ambiguous condensation of 3,4-diaminobenzoic  
acid (III) with AcCO<sub>2</sub>H (IV) gave only II, whereas the ambiguous  
condensation of Et 3,4-diaminobenzoate (V) with Et pyruvate (VI) gave  
equal portions of I and II. 3-Nitro-4-bromobenzoic acid (24.6 g.), 26.8  
g. dl- $\alpha$ -alanine, 33.6 g. NaHCO<sub>3</sub>, and 50 ml. H<sub>2</sub>O heated 48 hrs. at  
95° gave 23.3 g. N-(2-nitro-4-carboxyphenyl)-dl- $\alpha$ -alanine  
(VII), m. 245-5.5°. VII refluxed 4 hrs. with alc. and H<sub>2</sub>SO<sub>4</sub> gave  
82% di-Et ester (VIII), m. 92.5-3.0° (alc.-H<sub>2</sub>O). Et  
p-aminobenzoate (16.5 g.) and 15.3 g. dl- $\alpha$ -bromopropionic acid  
heated 1.5 hrs. on a steam bath gave 10.3 g. N-(4-carbethoxyphenyl)dl-  
 $\alpha$ -alanine (IX), m. 133-5° (H<sub>2</sub>O). IX (10.3 g.) added  
portionwise at 4° in 10 min. to 35 ml. concentrated HNO<sub>3</sub>, the mixture kept  
15 min. at 23-6° and the product poured over ice gave 5.9 g.  
N-(2-nitro-4-carbethoxyphenyl)-dl- $\alpha$ -alanine (X), m. 151-2°  
(PhMe). Hydrolysis of X in refluxing 20% HCl gave 88.5%  
N-(2-nitro-2-carbethoxyphenyl)-dl- $\alpha$ -alanine (XI), yellow prisms, m.  
244-5°. XI (2.54 g.), 1.68 g. NaHCO<sub>3</sub>, 25 ml. H<sub>2</sub>O, and 2 g. Raney  
Ni reduced 1 hr. at 50° and 60 lb./sq. in. gave 1.2 g.  
3-methyl-7-carboxy-3,4-dihydro-2-quinoxalinone (XII), m. 291-3°  
(95% alc.). XII (618 mg.), 6 ml. 10% NaOH, and 3 ml. 30% H<sub>2</sub>O<sub>2</sub> heated 1  
hr. gave 600 mg. II, prisms, m. 329-32° (decomposition) (H<sub>2</sub>O). Reduction of  
100 mg. II with Raney Ni at 25° in 5 ml. H<sub>2</sub>O containing 100 mg. NaHCO<sub>3</sub>  
gave 75 mg. XII. XI (2.8 g.), 0.2 g. 5% PdCl<sub>2</sub> on C, and 30 ml. alc.  
reduced 2 hrs. at 100° and 60 lb./sq. in. gave a product, which  
(treated 15 min. on the steam bath with 10 ml. H<sub>2</sub>O and 3.5 ml. 30% H<sub>2</sub>O<sub>2</sub>)  
gave 125 mg. 3-methyl-7-carbethoxy-2-quinoxalinone (XIII), white needles,  
m. 199-200°. Saponification of XII gave II. II (150 mg.), 20 ml. alc.,  
and 0.5 ml. H<sub>2</sub>SO<sub>4</sub> refluxed 4 hrs. gave 3.3% XIII. Et 3-nitro-4-  
acetamidobenzoate (9 g.), 1 g. Raney Ni, and 60 ml. alc. reduced 2 hrs. at  
25° and 60 lb./sq. in. gave 3.8 g. Et 3-amino-4-acetamidobenzoate  
(XIV), platelets, m. 142-3° (H<sub>2</sub>O). Condensation of XIV with Et

dl- $\alpha$ -bromopropionate in alc. gave 20% 2-methyl-5-carbethoxybenzimidazole (XV), m. 180°. In a similar fashion, 3-nitro-4-acetamidobenzoic acid reduced over Pd-C in alc. and then refluxed 4 hrs. with Et dl- $\alpha$ -bromopropionate gave 10% 2-methyl-5-carboxybenzimidazole (XVI), m. 312-14.5°. XVI was transformed into XV. Et m-nitro-benzoate (39 g.) in 150 ml. 95% alc. reduced 3 hrs. at 55° and 80 lb./sq. in. gave 30.7 g. Et 3-aminobenzoate (XVII), b5 160-1°, n<sub>D</sub>22 1.5600, d<sub>22</sub> 1.1248. XVII and dl- $\alpha$ -bromopropionic acid heated 4 hrs. at 120° gave 28% N-(4-carbethoxyphenyl)-dl- $\alpha$ -alanine (XVIII), m. 115-17° (C<sub>6</sub>H<sub>6</sub>). When XVIII was treated with HNO<sub>3</sub>, only tars resulted. 3-Bromo-4-nitroaniline (4.34 g.) and 3.5 ml. concentrated HCl added to 100 ml. H<sub>2</sub>O, the mixture treated in 8 min. with 1.4 g. NaNO<sub>2</sub> in 8 ml. H<sub>2</sub>O and stirred 10 min., 0.6 g. unchanged amine removed, treated with a solution of CuCN (from 5 g. CuSO<sub>4</sub>·5H<sub>2</sub>O and 5.6g. KCN in 50 ml. H<sub>2</sub>O), heated to 90°, the filtrate of diazonium salt added in 15 min., the mixture refluxed 5 min., and filtered, the residue extracted with hot H<sub>2</sub>O, the filtrates cooled, the precipitate extracted with hot CCl<sub>4</sub>, and the extract evaporated gave 1 g. 3-bromo-4-nitrobenzonitrile (XIX), m. 104-5°. Hydrolysis of XIX gave 61% 3-bromo-4-nitrobenzoic acid (XIXa), m. 199-201° (alc.). 3-Amino-4-nitrotoluene (45.6 g.) and 180 g. AcOH treated with 294 g. concentrated H<sub>2</sub>SO<sub>4</sub> at 50-60°, the mixture cooled to 0°, treated 1 hr. at 0-5° with 27.6 g. NaNO<sub>2</sub> in 54 ml. H<sub>2</sub>O, and stirred 0.5 hr. at 0° the solution added portionwise to 450 ml. H<sub>2</sub>O, 144 g. KBr, and 67 g. CuBr<sub>2</sub> the mush dissolved in 40 ml. ice H<sub>2</sub>O, stirred 15 min. at 0° and heated 4 hrs. at 75°, after 12 hrs. at 25°, 1.5 l. H<sub>2</sub>O added, and the oil dissolved in 150 ml. Et<sub>2</sub>O, washed, and evaporated gave 53 g. 3-bromo-4-nitrotoluene (XX), b5 135-40°, m. 35-6°. H<sub>2</sub>O (1500 ml.), 36.2 g. MgSO<sub>4</sub>, 43.2 g. XX, and 31.6 g. KMnO<sub>4</sub> refluxed 5 hrs., similarly treated twice more with KMnO<sub>4</sub>, cooled to 10°, and filtered (13 g. starting material recovered), gave (in the filtrates) 44.3% XIXa. Oxidation of XX with KMnO<sub>4</sub> buffered with CO<sub>2</sub> gave 38% overall yield XIXa. Nonbuffered solns. gave no yield and no starting material. Similar oxidation of 3-chloro-4-nitrotoluene gave 28% 3-chloro-4-nitrobenzoic acid, m. 184-5°. XIXa condensed with dl- $\alpha$ -alanine gave 37.4% N-(2-nitro-5-carboxyphenyl)-dl- $\alpha$ -alanine (XXI), platelets, m. 236-7° (H<sub>2</sub>O). 3-Chloro-4-nitrobenzoic acid did not react with dl- $\alpha$ -alanine under the above conditions. Esterification of XXI gave the di-Et ester, orange platelets, m. 58-9° (alc.-H<sub>2</sub>O). XXI was similarly converted (13.4% yield) to 3-methyl-3,4-dihydro-6-carboxy-2-quinoxalinone hydrate (XXII), m. 261-2°. XXII oxidized and purified gave 35.9% I.H<sub>2</sub>O, m. 334-6° (decomposition). Reduction of I (75 mg.) with Raney Ni at 65° and 60 lb./sq. in. in 5 ml. H<sub>2</sub>O containing 100 ml. NaHCO<sub>3</sub> gave 50 mg. XXII. Direct esterification of I gave 6.7% 3-methyl-6-carbethoxy-2-quinoxalinone (XXIII), obtained in 40% yield from the di-Et ester of XXI, prisms, m. 229-30° (C<sub>6</sub>H<sub>6</sub>). Saponification of XXIII gave I. A solution of 5 g. 3-nitro-4-aminobenzoic acid in 50 ml. 95% alc. catalytically reduced over Pd-C and the solution of III filtered into a H<sub>2</sub>O solution of 1.2 equivs. of IV gave 1.2 g. II. V (prepared from Et 3-nitro-4-aminobenzoate) condensed with IV gave 55.5% II. When V was condensed with VI in alc. a 100% yield of mixed esters, m. 173-85° was obtained. Approx. equal portions of the two isomers were present. Recrystn. gave 17% II; the residue gave some I.

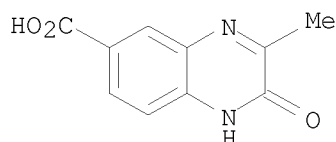
IT 105105-48-4  
(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 105105-48-4 CAPLUS

CN 6-Quinoxalinecarboxylic acid, 1,2-dihydro-3-methyl-2-oxo-, ethyl ester  
(CA INDEX NAME)



IT 103752-83-6, 6-Quinoxalinecarboxylic acid, 1,2-dihydro-3-methyl-2-oxo-  
(and derivs.)  
RN 103752-83-6 CAPLUS  
CN 6-Quinoxalinecarboxylic acid, 1,2-dihydro-3-methyl-2-oxo- (CA INDEX NAME)



L28 ANSWER 210 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1961:144229 CAPLUS

DOCUMENT NUMBER: 55:144229

ORIGINAL REFERENCE NO.: 55:27332g-i,27333a-d

TITLE: 8-Chloroalloxazine, a new diuretic. Synthesis and structure

AUTHOR(S): Petering, Harold G.; Van Giessen, Garrett J.

CORPORATE SOURCE: Upjohn Co., Kalamazoo, MI

SOURCE: Journal of Organic Chemistry (1961), 26, 2818-21

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 55:144229

AB 8-Chloroalloxazine (I), a new diuretic, was obtained in good yield and purity by the condensation of alloxan (II) with 4-chloro-2-aminoaniline (III) in strongly acidic solns. or in glacial AcOH in the presence of boric acid. When the same condensation was carried out in weakly acidic aqueous solution or in neutral solvents, 2-hydroxy-6-chloroquinoxaline-3-carboxylic acid ureide (IV) was the main or exclusive product. Evidence for the structure of these compds. was derived from degradation studies, phys. properties, and a comparison of these with the products formed when II and 1,2-diaminobenzene (V) were condensed, the latter reaction giving well characterized compds. V (1.08 g.) in 10 ml. AcOH added to 20 ml. AcOH containing 1.6 g. II.H<sub>2</sub>O and 0.12 g. boric acid, stirred 4 hrs., and the solid collected gave 1.44 g. alloxazine, m. above 400°. Catalytic reduction of 4-chloro-2-nitroaniline with PtO<sub>2</sub> in Et<sub>2</sub>O or EtOAc gave III. Condensation of III and II in AcOH in the presence of boric acid at room temperature was carried out. Thus, 11 g. III and 10 g. II condensed in 150 ml. AcOH with 0.64 g. boric acid (stirred 4 hrs. at 40°) gave 12.9 g. I, m. 330-5°. This reaction was studied to determine the amount of boric acid necessary to prevent formation of IV as an impurity. These data indicated that more than 0.03 molar equivalent of boric acid was needed in relation to III and II to obtain I free of IV. III (1 g.) and 1 g. II was added to HCl of various normalities, the mixture heated to 90°, held there 1 hr., cooled, and refrigerated 14 hrs., and the solid removed and washed; the product obtained when 1.0 to 5.0N HCl was used as the solvent was much more wettable and soluble than the product obtained by the above procedure. The following results were obtained (normality of HCl, yield,

ratio of I to IV given): 0.36, 1.38, 1:2; 0.50, 1.29, 1:0.1; 1.0, 1.22, trace of IV; 1.25, 1.28, trace IV; 2.5, 1.26, only I; 5.0, 1.14, only I. V (1.08 g.) combined with 1.3 g. II and the mixture stirred 1.75 hrs. at room temperature with 40 ml. 95% alc. gave 1.72 g. 2-hydroxyquinoxaline-3-carboxylic acid ureide, m. 249-51°. III (2.84 g.) and 3.2 g. II in 150 ml. 10% AcOH stirred at room temperature 4 hrs. gave 5 g. IV, m. 249-50°. I (2.75 g.) in 17 ml. 75% H2SO4 (preheated to 200°) was held 10 min. at 195-205°, 15 min. at 165-75°, 1 hr. at 135-45°, and finally 20 min. at 120°, poured over ice, the mixture extracted with Et2O, the unchanged material removed by centrifugation, washed, and dried. The supernatant was made alkaline and again extracted with Et2O. The alkaline

washes

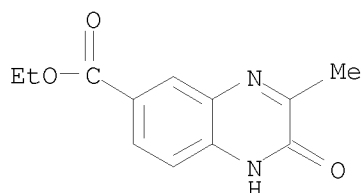
combined and dried gave 1.2 g. 2-amino-7-chloroquinoxaline, m. 199-200° (alc.-C6H6). IV (1 g.) in 20 ml. 50% H2SO4 heated 0.5 hr. at 135° and poured onto ice gave 0.61 g. 2-hydroxy-6-chloroquinoxaline, m. 300-5°. V (200 mg.) treated 10 min. at 90° with 3 ml. POCl3, excess POCl3 distilled, and the oily residue mixed with ice H2O gave 100 mg. 2,6-dichloroquinoxaline, m. 153-5°. Alloxazine (2.75 g.) degraded in 75% H2SO4 as indicated above gave 1.18 g. unchanged material. The yellow solid when recrystd. gave 2-aminoquinoxaline, m. 155-7° (C6H6-Et2O). Ultraviolet spectra and chromatographic behavior of the above compds. were given in tables.

IT 105105-48-4

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 105105-48-4 CAPLUS

CN 6-Quinoxalinecarboxylic acid, 1,2-dihydro-3-methyl-2-oxo-, ethyl ester  
(CA INDEX NAME)



L28 ANSWER 211 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1961:54315 CAPLUS

DOCUMENT NUMBER: 55:54315

ORIGINAL REFERENCE NO.: 55:10455i,10456a-d

TITLE: Nitration of quinoxalines (Addendum)

AUTHOR(S): Otomasu, Hirotaka; Yoshida, Kei

CORPORATE SOURCE: Hoshi Coll. Pharm., Tokyo

SOURCE: Chemical & Pharmaceutical Bulletin (1960), 8, 475-8

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB The previous report (CA 53, 10243a) that nitration of the 3,2-Me(HO) derivative (I) of quinoxaline (II) gave its 6-O2N derivative was reexamd. Nitration of 0.5 g. 2-HO derivative (III) of II by warming 10 min. at 40° with 5 cc. concentrated H2SO4 and 0.35 g. powdered KNO3 with rapid stirring yielded 77% 6-O2N derivative (IV) of III, m. 306°. The structure of IV was confirmed by heating it 2 hrs. in an oil bath with POCl3 to form the 2,6-Cl(O2N) derivative of II, m. 202°, identical with the compound reported by Horner, et al. (CA 48, 2692b), and further confirmed by treatment of 1 g. IV in alkaline solution with 3 cc. Me2SO4 to give.

1-methyl-2-oxo-6-nitro-1,2-dihydroquinoxaline, m. 213°, identical with the compound (0.8 g.) obtained by refluxing 1 hr. 1 g.

2,4-H<sub>2</sub>N(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>NHMe with 1.7 g. BuO<sub>2</sub>CCHO (V) in EtOH. However, under different nitration conditions (concentrated HNO<sub>3</sub> in AcOH at room temperature)

III

gave the 7-O<sub>2</sub>N derivative (VI) (Asano and Asai CA 53, 21979b), m. 275-6°. In confirmation, 4 g. 2,4-H<sub>2</sub>N(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub> (VII) was refluxed 2 hrs. with 4 g. V in EtOH to give 0.8 g. IV and 3 g. VI, converted with POCl<sub>3</sub> to the 2,7-Cl(O<sub>2</sub>N) derivative of II, m. 185-6°. Repetition of the previously described (loc. cit.) condensation of 1.2 g. VII with 0.8 g. AcCO<sub>2</sub>H gave not only 0.8 g. 7-O<sub>2</sub>N derivative (VIII) of 2-hydroxy-3-methylquinoxaline (IX), m. 255°, but also 0.2 g. 6-O<sub>2</sub>N derivative (X) of IX, m. 280° (decomposition), each converted with POCl<sub>3</sub> to the corresponding 2,3,7- and 2,3,6-ClMe(O<sub>2</sub>N) derivs. of II, m. 153° and 136°, resp. X was identical with the nitration product of I. Infrared curves for samples of IV, VI, VIII, and X prepared both by condensation and by nitration confirmed the assigned structures.

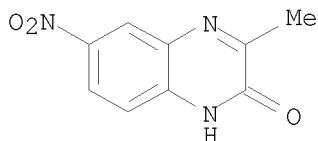
IT 19801-10-6P, 2-Quinoxalinol, 3-methyl-6-nitro-

RL: PREP (Preparation)

(preparation of)

RN 19801-10-6 CAPLUS

CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)



L28 ANSWER 212 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:103447 CAPLUS

DOCUMENT NUMBER: 54:103447

ORIGINAL REFERENCE NO.: 54:19681c-i,19682a-e

TITLE: Synthesis of heterocycles. XXIV. 4-Hydroxycarbostryls

AUTHOR(S): Ziegler, E.; Gelfert, K.

CORPORATE SOURCE: Univ. Graz, Austria

SOURCE: Monatshefte fuer Chemie (1959), 90, 858-65

CODEN: MOCMB7; ISSN: 0026-9247

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB Several 4-hydroxycarbostryls were prepared by different methods. In the case of CH<sub>2</sub>(CONHC<sub>6</sub>H<sub>3</sub>Me<sub>2</sub>-2,5)<sub>2</sub> (I), its reaction with AlCl<sub>3</sub>NaCl gave 4-hydroxy-5,8-dimethylcarbostryl (II) as well as the isomeric 4-hydroxy-6,8-dimethylcarbostryl (III). Such a migration of the Me group was not observed in the other compds. investigated. 2,6-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub> (2.42 g.) and 2 g. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> (IV) heated 90 min. at 180° and the product crystallized from a little EtOH gave 2.2 g. CH<sub>2</sub>(CONHC<sub>6</sub>H<sub>3</sub>Me<sub>2</sub>-2,6)<sub>2</sub> (V), m. 253°. CH<sub>2</sub>(CO<sub>2</sub>H)<sub>2</sub> (2 g.) and 5.2 g. 2,4,6-Me<sub>3</sub>C<sub>6</sub>H<sub>2</sub>NH<sub>2</sub> (VI) mixed with 2 g. POCl<sub>3</sub>, heated 30 min. at 100°, the product treated with aqueous alkali, and crystallized from AmOAc gave 25% CH<sub>2</sub>(CONHC<sub>6</sub>H<sub>2</sub>Me<sub>3</sub>-2,4,6)<sub>2</sub>

(VII),

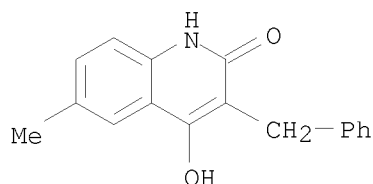
m. 278°. IV (1 g.) and 1.7 g. VI heated 1 hr. at 180° and the product rubbed with EtOH gave 65% VII. IV (4 g.) and 6.5 g. 2,4-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub> (VIII) heated 2 hrs. at 180-210° gave 5.2 g. CH<sub>2</sub>(CONHC<sub>6</sub>H<sub>3</sub>Me<sub>2</sub>-2,4)<sub>2</sub> (IX), m. 245° (EtOH-H<sub>2</sub>O). 2,3-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub> (X) (5 g.) and 3.5 g. IV heated 1 hr. at 180° gave 3.6 g. CH<sub>2</sub>(CONHC<sub>6</sub>H<sub>3</sub>Me<sub>2</sub>-2,3)<sub>2</sub> (XI), m. 200° (AcOH). V, VII, and IX did not undergo cyclization. X (3.6 g.) and 14.4 g. PhCH<sub>2</sub>CH(CO<sub>2</sub>Et)<sub>2</sub> (XII) heated 40 min. at 250°, the product rubbed with C<sub>6</sub>H<sub>6</sub>, and crystallized from a large volume of (Cl<sub>2</sub>CH)<sub>2</sub> (XIII) or AcOH gave 9.9 g. 3-benzyl-7,8-dimethyl-4-

hydroxycarbostyryl (XIV), m. over 360° (decomposition) (EtOH); acetate m. 250° (C6H6). XIV treated 5 hrs. at 100° with an excess of POCl3 gave 50% 2,4-dichloro-3-benzyl-7,8-dimethylquinoline, m. 97° (EtOH). XI (2 g.) added to a melt of 2 g. AlCl3 and 0.5 g. NaCl at 140°, stirred 15 min. at 250°, and worked up as usual gave 0.8 g. 4-hydroxy-7,8-dimethylcarbostyryl (XV), m. 317° (AcOH). XIV (4 g.) added to a melt of 10 g. AlCl3 and 2.4 g. NaCl and heated 10 min. at 200° gave 2.3 g. XV, m. 317°; acetate m. 208° (EtOAc). XV treated as above with POCl3 gave 2,4-dichloro-7,8-dimethylquinoline, m. 73° (EtOH). 4-MeC6H4NH2 (5 g.) and 24 g. XII heated 30 min. at 250°, the product rubbed with C6H6, and crystallized from XIII gave 11.4 g. 3-benzyl-4-hydroxy-6-methylcarbostyryl (XVI), m. 260°; acetate m. 258°. XVI (3 g.) added to a melt of 7.5 g. AlCl3 and 1.8 g. NaCl and the mixture heated 10 min. at 180° gave 1.8 g. 4-hydroxy-6-methylcarbostyryl (XVII), m. 325° (decomposition) (EtOH or AcOH); acetate m. 203° (AmOAc). XVII was further characterized by its conversion (POCl3, 2 hrs. at 100°) into 70% 2,4-dichloro-6-methylquinoline, m. 91° (MeOH). 2-MeC6H4NH2 (1 g.) and 4.8 g. XII heated 20 min. at 250°, the product rubbed with C6H6, and crystallized from AcOH gave 2.4 g. 3-benzyl-4-hydroxy-8-methylcarbostyryl (XVIII), m. 275°; acetate m. 225-6° (C6H6). XVIII (10 g.) added to a melt of 25 g. AlCl3 and 6 g. NaCl at 140°, towards the end of the reaction the mixture heated quickly to 180°, kept 5 min. at 180°, and the product crystallized from AcOH gave 6.1 g. 4-hydroxy-8-methylcarbostyryl, m. above 360° (decomposition) [acetate m. 208° (C6H6)], converted into 72% 2,4-dichloro-8-methylquinoline, m. 85° (EtOH). 2,5-Me2C6H3NH2 (XIX) (2.4 g.) and 9.6 g. XII heated 40 min. at 250°, the product rubbed with C6H6, and crystallized from AcOH gave 74% 3-benzyl-4-hydroxy-5,8-dimethylcarbostyryl, m. 250° [acetate m. 217° (C6H6)], converted into 43% 3-benzyl-2,4-dichloro-5,8-dimethylquinoline, m. 95° (EtOH). VIII (0.6 g.) and 2.4 g. XII heated 30 min. at 260°, the product rubbed with C6H6, and crystallized from XIII gave 90% 3-benzyl-4-hydroxy-6,8-dimethylcarbostyryl (XX), m. 258° [acetate m. 245° (C6H6)], converted (POCl3, 3 hrs. at 100°) into 48% 3-benzyl-2,4-dichloro-6,8-dimethylquinoline, m. 92° (EtOH). XX (2 g.) added with stirring to a melt of 5 g. AlCl3 and 1.2 g. NaCl at 140°, the mixture heated 10 min. at 200°, decomposed with ice and dilute HCl, and the product crystallized from AcOH gave III, m. 312° (decomposition) [acetate m. 254° (C6H6)], converted into 87% 2,4-dichloro-6,8-dimethylquinoline (XXI), m. 115.5° (EtOH-H2O). III (0.5 g.) and 1.3 g. XII heated 30 min. at 230°, the product rubbed with C6H6, and crystallized from PhNO2, gave 88% XXII (R = CH2Ph) (XXIII), m. 326°. XXIII in AlCl3NaCl heated 10 min. at 200°, the melt decomposed, the product repptd. from NaOH with HCl, and crystallized from PhNO2 gave 46% XXII (R = H) (XXIV), m. 300°. Heating III and CH2(CO2C6H3Cl2-2,4)2 15 min. at 230° gave 60% XXIV. XIX (5 g.) and 3.5 g. IV heated 90 min. at 180°, the product rubbed with EtOH, and crystallized from AcOH gave 5.4 g. I, m. 236-7°. I (5 g.) stirred into a melt of 5 g. AlCl3 and 1.5 g. NaCl at 150°, towards the end of the reaction the mixture heated 30 min. at 250°, and worked up gave 1.85 g. mixture (XXV) of II and III. The same mixture was obtained by heating II in AlCl3-NaCl 20 min. at 230°; the mixture was difficultly separable. XXV (1.6 g.) in 20 cc. POCl3 heated 3 hrs. at 100° and the product (1.35 g.) crystallized with hot MeOH gave 2,4-dichloro-5,8-dimethylquinoline, m. 80.5°; XXI, m. 115.5°, remained in the filtrate. XX treated as above with AlCl3-NaCl gave predominantly III; repeated recrystn. from AcOH gave 80% III, m. 312° (decomposition).

IT 108973-32-6P, Carbostyryl, 3-benzyl-4-hydroxy-6-methyl-  
 RL: PREP (Preparation)  
 (preparation of)

RN 108973-32-6 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(phenylmethyl)- (CA INDEX NAME)



L28 ANSWER 213 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:103446 CAPLUS

DOCUMENT NUMBER: 54:103446

ORIGINAL REFERENCE NO.: 54:19680h-i,19681a-c

TITLE: Synthesis of heterocycles. XXIII. Synthesis of 4-hydroxycarbostyryl and its derivatives

AUTHOR(S): Ziegler, E.; Gelfert, K.

CORPORATE SOURCE: Univ. Graz, Austria

SOURCE: Monatshefte fuer Chemie (1959), 90, 822-6

CODEN: MOCMB7; ISSN: 0026-9247

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

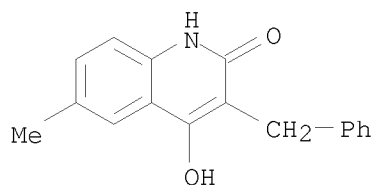
OTHER SOURCE(S): CASREACT 54:103446

AB cf. CA 54, 14239d. PhNH<sub>2</sub> (4.80 g.), 7.8 g. CH<sub>2</sub>(CO<sub>2</sub>H)<sub>2</sub> (I), and 17 g. POC13 heated 30 min. at 100°, the mixture decomposed, the product repptd. twice from NaOH with HCl, and crystallized from p-cresol gave 4.5 g. 4-hydroxycarbostyryl (II), m. 360°. A similar mixture mixed with 6 g. naphthalene (III) (suitable for eliminating the formation of contaminating pyronocarbostyryls) heated 15 min. at 100°, the III steam-distilled, and the product isolated with aqueous NaOH gave 4 g. II. Similarly were prepared the following derivs. of II (starting amine, conditions, derivative of II formed, m.p., % yield with III, % yield without III given): 3-ClC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>, 30 min. at 100°, 7-Cl, over 360° (PhNH<sub>2</sub>), 60, 85; 4-MeC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>, 30 min. at 100°, 6-Me, 325° (decomposition) (p-cresol or AcOH), 49, 54; 2,5-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub> (IV), 2 hrs. at 100°, 5,8-di-Me, over 360° (AcOH), -, 30 [in addition alkali insol. CH<sub>2</sub>(CONHC<sub>6</sub>H<sub>3</sub>Me<sub>2</sub>-2,5)<sub>2</sub>, m. 236-7° (AcOH), was obtained];, 2,4-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub>, 30 min. at 100°, 6,8-di-Me, 312° (decomposition) (PhNH<sub>2</sub> or AcOH), 42, 46; 2,3-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub>, 30 min. at 100°, 7,8-di-Me, 317° (AcOH), -, 58; Ph<sub>2</sub>NH, 1 hr. at 90-110°, 1-Ph, 295° (PhNO<sub>2</sub>), 42, -; PhCH<sub>2</sub>NH<sub>2</sub>, 1 hr. at 90-110°, 1-PhCH<sub>2</sub>, 283°, 40, - (with POBr<sub>3</sub> as the condensation agent a somewhat better yield was obtained); PhNH<sub>2</sub> [with PhCH<sub>2</sub>CH(CO<sub>2</sub>H)<sub>2</sub> (V) and POC13], 20 min. at 100°, 3-PhCH<sub>2</sub>, 214-16° (EtOH or PhCl), -, 80 (not necessary to use III in this case); IV (with V and POC13), 2 hrs. at 100°, 3-benzyl-5,8-dimethyl, 250° (AcOH), -, 61 (not necessary to use III in this case). IV (2.5 g.), 2 g. I, and 25 g. POC13 heated 3 hrs. at 100°, the material extracted with Et<sub>2</sub>O, and the extract evaporated gave 0.8 g. 2,4-dichloro-5,8-dimethylquinoline, m. 80.5° (EtOH or MeOH). p-BrC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> (1 g.), 1 g. I, 4 g. III, and 4 g. POC13 heated 15 min. at 90-110°, the III removed, the residual product rubbed with C<sub>6</sub>H<sub>6</sub>, and crystallized from dioxane-H<sub>2</sub>O and then from dioxane gave 1 g. presumably 4-chloro-6-bromocarbostyryl, m. 219°, insol. in alkali and mineral acid.

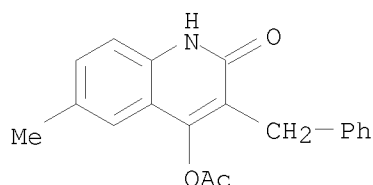
IT 108973-32-6 109811-65-6  
(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 108973-32-6 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(phenylmethyl)- (CA INDEX NAME)



RN 109811-65-6 CAPLUS  
 CN Carbestyryl, 3-benzyl-4-hydroxy-6-methyl-, acetate (6CI) (CA INDEX NAME)



L28 ANSWER 214 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:103445 CAPLUS

DOCUMENT NUMBER: 54:103445

ORIGINAL REFERENCE NO.: 54:19680a-h

TITLE: Syntheses of hydrogenated quinolines and isoquinolines as analgesics. XVII. Steric structure of 8-aza-N-methyl-des-N-morphinan

AUTHOR(S): Oshiro, Susumu

CORPORATE SOURCE: Tanabe Seiyaku, Osaka

SOURCE: Tetrahedron (1960), 8, 304-12  
 CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB The configuration of positions 13 and 14 in the title compound, III, was investigated. V (1.0 g.) in 7 ml. 20% HCl heated 5 hrs. on a steam bath and the mixture evaporated in vacuo, the dry residue basified with aqueous K2CO3,

and extracted with Et2O gave 0.8 g. 10-phenyl-1,2,3,4,5,6,7,10-octahydroquinoline, b0.5 115-18°, v 3250, 1660 cm.-1 (in neutral medium,  $\alpha,\beta$ -unsatd. amine), v 1692 cm.-1 (in acid medium, ketimine); HClO4 salt m. 174-6°; picrate m. 152-3° (Me2CO).

The HClO4 salt (0.7 g.) in 25 ml. alc. hydrogenated 5 min. at 20°/1 atmospheric with 0.2 g. PtO2 and the filtered solution evaporated in vacuo gave 10-phenyldecahydroquinoline HClO4 salt, m. 215-17°; picrate m. 157-8°, failing to show absorption of  $\alpha,\beta$ -unsatd. amine.

VIa (0.6 g.) methylated with 5 ml. HCO2H and 1 ml. 35% HCHO gave isomeric 8-methoxycarbonyl-1-methyl-10-phenyldecahydroquinoline (VIIa), m.

95-6°, mixed m.p. with VII 75-80°. VI.HCl (0.5 g.) boiled

10 hrs. with 20 ml. concentrated HCl and the mixture evaporated in vacuo, the residual

amino acid HCl salt heated 8 hrs. at 130-40° (oil bath) with polyphosphoric acid (6 g. P2O5 and 6 ml. 85% H3PO4) and the cooled mixture diluted with ice H2O, basified with 30% aqueous KOH and extracted below 10° with Et2O, the washed and dried exts. evaporated, and the residue crystallized (Et2O) gave 0.15 g. 8-aza-10-oxodes-N-morphinan (VIII), m. 90-2°, v 3300, 1690, 760 cm.-1, methylated (120 mg.) with 60 mg. Me2SO4 and 110 mg. powdered K2CO3 in Me2CO to authentic I. VIII (0.3 g.) acetylated 6 hrs. at



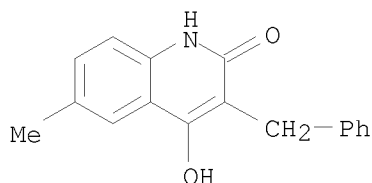
100° with 2 ml. Ac<sub>2</sub>O and 1 ml. C<sub>5</sub>H<sub>5</sub>N and the mixture decomposed with ice H<sub>2</sub>O gave 0.3 g. N-acetyl-8-aza-10-oxodes-N-morphinan (IX), m. 195-7°. IX (170 mg.) in 3 ml. Me<sub>3</sub>COH and 50 mg. K in 3 ml. Me<sub>3</sub>COH gently refluxed at 100° 5 hrs. and the solvent evaporated, the residue diluted with H<sub>2</sub>O, and repeatedly extracted with EtOAc gave 130 mg. 8-aza-10-hydroxy-8,10-( $\alpha$ -oxoethano)des-N-morphinan (X), m. 238-40°,  $\nu$  3240, 1620 cm.<sup>-1</sup>, ultraviolet absorption curve indicating disappearance of characteristic absorption of an aromatic ketone and presence of a benzene ring. X (350 mg.) heated 10 hrs. at 100° with 5 ml. Ac<sub>2</sub>O and 0.1 ml. concentrated H<sub>2</sub>SO<sub>4</sub> and the mixture decomposed with ice H<sub>2</sub>O gave the acetoxy derivative, 10-acetoxy-8-aza-8,10-( $\alpha$ -oxoethano)des-N-morphinan, C<sub>20</sub>H<sub>23</sub>NO<sub>3</sub>, m. 188-90°,  $\nu$  1725 cm.<sup>-1</sup> VIII (0.3 g.) in 20 ml. alc. and 3 ml. 17% alc. HCl hydrogenated with 0.1 g. PtO<sub>2</sub> 25 min. and the filtered solution evaporated gave 8-aza-10-hydroxydes-N-morphinan HCl salt, m. 246° (decomposition), basified with aqueous K<sub>2</sub>CO<sub>3</sub> to give the free base, C<sub>16</sub>H<sub>21</sub>NO, m. 137-9° (petr. ether). Formation of the lactam X was only possible when rings B/C were in the cis position and consequently III had the morphinan type of structure with B/C and C/D rings in the cis and trans position, resp.

IT 108973-32-6 109811-65-6

(Derived from data in the 6th Collective Formula Index (1957-1961))

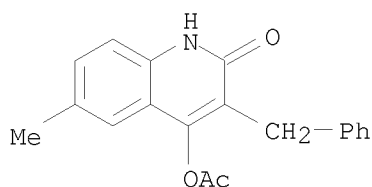
RN 108973-32-6 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-6-methyl-3-(phenylmethyl)- (CA INDEX NAME)



RN 109811-65-6 CAPLUS

CN Carbostyryl, 3-benzyl-4-hydroxy-6-methyl-, acetate (6CI) (CA INDEX NAME)



L28 ANSWER 215 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:17011 CAPLUS

DOCUMENT NUMBER: 54:17011

ORIGINAL REFERENCE NO.: 54:3423e-g

TITLE: 4-Methyl-2,3-dihydrofuro [2,3-b]quinolines

AUTHOR(S): Mori, Yo; Mihashi, Susumu; Ohta, Tatsuo

CORPORATE SOURCE: Tokyo Coll. Pharm.

SOURCE: Chemistry & Industry (London, United Kingdom) (1959) 1160-1

CODEN: CHINAG; ISSN: 0009-3068

DOCUMENT TYPE: Journal

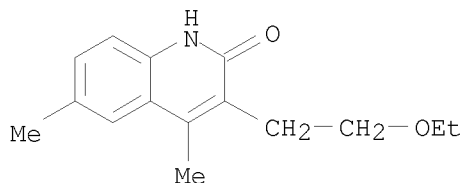
LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 54:17011

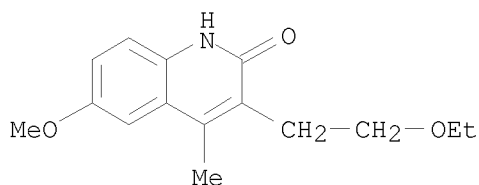
AB The Na derivative of AcCH<sub>2</sub>CONHPh boiled with EtO(CH<sub>2</sub>)<sub>2</sub>Br in absolute EtOH, or 2

ml. PhNH<sub>2</sub> heated with 10 g. AcCH(CH<sub>2</sub>CH<sub>2</sub>OEt)-CO<sub>2</sub>Et 1 hr. at 160° gave AcCH(CH<sub>2</sub>CH<sub>2</sub>OEt)CONHPh, which treated with concentrated H<sub>2</sub>SO<sub>4</sub> (Knorr synthesis) gave 3-(2-ethoxyethyl)-4-methylcarbostyryl (I), m. 142-3° (MeOH), 1.7 g. of which heated 2 hrs. at 105-15° with 54 g. polyphosphoric acid gave the title compound (II), m. 123-3.5° (dilute EtOH). I had λ 271 and 326 mμ, characteristic of the 2-quinoline structure, and strong amide carbonyl absorption at 1650 cm.<sup>-1</sup> II showed sharp absorption at 1630 cm.<sup>-1</sup> and λ 228, 264, 273, 313, and 327 mμ, characteristic of quinolines with an ether function in the 2-position. Similarly prepared were the following derivs. of I (ring substituent and m.p. given): 6-Me, 170-0.5°; 6-MeO, 151-1.5°; 7-Cl, 158.5-9°; 6-Cl, above 360° The following derivs. of II: 6-Me, 182°; 6-MeO, 161-2°; 7-Cl, 131-2°; and 6-Cl, 230-1°.

IT 92652-02-3P, Carbostyryl, 3-(2-ethoxyethyl)-4,6-dimethyl-  
 92652-41-0P, Carbostyryl, 3-(2-ethoxyethyl)-6-methoxy-4-methyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 92652-02-3 CAPLUS  
 CN Carbostyryl, 3-(2-ethoxyethyl)-4,6-dimethyl- (6CI, 7CI) (CA INDEX NAME)



RN 92652-41-0 CAPLUS  
 CN Carbostyryl, 3-(2-ethoxyethyl)-6-methoxy-4-methyl- (6CI, 7CI) (CA INDEX NAME)



L28 ANSWER 216 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1959:56482 CAPLUS  
 DOCUMENT NUMBER: 53:56482  
 ORIGINAL REFERENCE NO.: 53:10243a-f  
 TITLE: Nitration of quinoxalines  
 AUTHOR(S): Otomasu, Hirotaka; Nakajima, Shoichi  
 CORPORATE SOURCE: Hoshi Coll. Pharm., Tokyo  
 SOURCE: Chemical & Pharmaceutical Bulletin (1958), 6, 566-70  
 CODEN: CPBTAL; ISSN: 0009-2363  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB Quinoxaline (I), its N-oxide, and its 2,3-Me<sub>2</sub> derivative resisted nitration even with concentrated H<sub>2</sub>SO<sub>4</sub> and fuming HNO<sub>3</sub> (d. 1.52) at 100°. The presence of polar substituents in either ring facilitated nitration. The 6-MeO derivative (II) of I (0.43 g.) in 4 cc. concentrated H<sub>2</sub>SO<sub>4</sub> at 0°, well stirred during the addition of 0.5 g. powdered KNO<sub>3</sub>, the mixture kept 2 hrs. at

room temperature, and poured on ice yielded 0.45 g. 5,6-O<sub>2</sub>N(MeO) derivative (III) of

I, m. 203° (Me<sub>2</sub>CO), and this catalytically reduced (10% Pd-C) in MeOH gave the 5,6-H<sub>2</sub>N(MeO) derivative (IV) of I, m. 96° (ligroine).

The position of the NO<sub>2</sub> group in III was confirmed by the synthesis of IV from 4,2,3-H<sub>2</sub>N(O<sub>2</sub>N)2C<sub>6</sub>H<sub>2</sub>OMe (V). V (5 g.) catalytically reduced (Pd-C) to 2,3,4-(H<sub>2</sub>N)3C<sub>6</sub>H<sub>2</sub>OMe, and this under H warmed 30 min. with 10 g. glyoxal bisulfite in 200 cc. hot H<sub>2</sub>O, the mixture refluxed 1.5 hrs. on a water bath, evaporated in vacuo, made alkaline with NaOH, and the resulting solid

extracted with

CHCl<sub>3</sub> yielded 1.2 g. IV, identical with the sample from III. No isomeric 5,8-H<sub>2</sub>N(MeO) derivative (VI) of I was produced in this reaction. However, 4 g. 4,2,3-AcNH(O<sub>2</sub>N)2C<sub>6</sub>H<sub>2</sub>OMe in place of V similarly reduced and condensed with (CHO)<sub>2</sub> yielded 1.8 g. 5,8-AcNH(MeO) derivative of I, m. 149°, hydrolyzed by warming 1 hr. on a water bath with 20% NaOH and extracting the cooled mixture with CHCl<sub>3</sub> to give VI, m. 125° (C<sub>6</sub>H<sub>6</sub>). The 5-MeO derivative of I (0.5 g.) in 5 cc. concentrated H<sub>2</sub>SO<sub>4</sub> warmed 15 min. at 60° with 1 g. KNO<sub>3</sub> and the mixture poured into 80 cc. ice water yielded 0.6 g. 5,6,8-MeO(O<sub>2</sub>N)<sub>2</sub> derivative of I, m. 204-6° (MeOH), and no mono-O<sub>2</sub>N derivative could be formed even at a lower temperature 3,2-Me(HO) derivative

of I (5 g.)

nitrated as was II yielded 5 g. 3,2,6-Me(HO)(O<sub>2</sub>N) derivative (VII) of I, m. 270° (Me<sub>2</sub>CO), but no nitration of the 2,3-Cl(Me) or 2,3-(EtO)Me derivs. of I took place under similar conditions. In an attempt to confirm the position of the NO<sub>2</sub> group in VII by synthesis, 1.5 g.

3,4-(H<sub>2</sub>N)2C<sub>6</sub>H<sub>3</sub>NO<sub>2</sub> (VIII) in 200 cc. MeOH was boiled 1 hr. with 1 g. AcCO<sub>2</sub>H and the MeOH evaporated to yield 1.85 g. 3,2,7-Me(HO)(O<sub>2</sub>N) derivative of I, m. 255° (MeOH), obviously different from VII. VII (1 g.) methylated with 4 cc. Me<sub>2</sub>SO<sub>4</sub> in 20 cc. 20% NaOH yielded 0.55 g. 1,3-dimethyl-2-oxo-6-nitro-1,2-dihydroquinoxaline, m. 218° (Me<sub>2</sub>CO), formed also (0.16 g.) from 0.2 g. 2,4-H<sub>2</sub>N(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>NHMe in 50 cc. MeOH condensed as was VIII with 0.2 g. AcCO<sub>2</sub>H. This synthesis confirms the 6-position of NO<sub>2</sub> in VII.

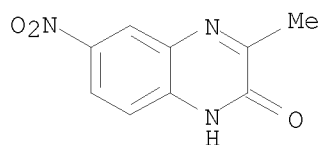
IT 19801-10-6P, 2-Quinoxalinol, 3-methyl-6-nitro-

RL: PREP (Preparation)

(preparation of)

RN 19801-10-6 CAPLUS

CN 2(1H)-Quinoxalinone, 3-methyl-6-nitro- (CA INDEX NAME)



L28 ANSWER 217 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1959:23305 CAPLUS

DOCUMENT NUMBER: 53:23305

ORIGINAL REFERENCE NO.: 53:4273b-d

TITLE: Synthesis of heterocycles. XII. Anibine

AUTHOR(S): Ziegler, E.; Nolken, E.

CORPORATE SOURCE: Univ. Graz, Austria

SOURCE: Monatshefte fuer Chemie (1958), 89, 391-3

CODEN: MOCMB7; ISSN: 0026-9247

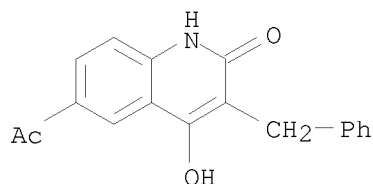
DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB From the South American rosewood tree (Aniba duckei), Mors, et al. (C.A. 52, 405c), isolated the alkaloid anibine (I), 4-methoxy-6-(3-pyridyl)-2-pyrone. A simple synthesis of I is described. 3-Acetylpyridine (2 g.) and 4.8 g. PhCH<sub>2</sub>CH(CO<sub>2</sub>C<sub>6</sub>H<sub>3</sub>Cl<sub>2</sub>-2,4)<sub>2</sub> (II) heated 30 min. at 250°,

the melt triturated with C<sub>6</sub>H<sub>6</sub>, and the residue crystallized from PhNO<sub>2</sub>, PhOAc, m-MeC<sub>6</sub>H<sub>4</sub>OH, or from a large volume of BuOH gave 1.4 g. 3-benzyl-4-hydroxy-6-(3-pyridyl)-2-pyrone (III), m. 301°. III (7.7 g.) and 14.3 g. finely powdered AlCl<sub>3</sub> heated 10 min. at 160°, the mixture decomposed with ice, the product purified by solution in NaOH and precipitation with AcOH and by further solution in dilute HCl, and crystallized from dioxane, PhNO<sub>2</sub>, or BuOH gave 78% 4-hydroxy-6-(3-pyridyl)-2-pyrone (IV), m. 212°. IV (0.5 g.) in 8 ml. absolute MeOH treated portion-wise under ice-cooling with 0.22 g. CH<sub>2</sub>N<sub>2</sub> in 30 ml. Et<sub>2</sub>O, the mixture kept 4 hrs., the Et<sub>2</sub>O evaporated, the remaining solution warmed, and let crystallize gave 0.33 g. I, m. 177-8° (after sublimation at 130°/0.3 mm. and crystallization from EtOH); the ultraviolet and infrared spectra were identical with natural I. An attempt to prepare 4-methoxy-6-piperonyl-2-pyrone, another product isolated from the rosewood tree, failed (cleavage with AlCl<sub>3</sub>). Acetopiperone (1 g.) and 3.9 g. II heated 30 min. at 255°, the melt cooled, treated with C<sub>6</sub>H<sub>6</sub>, and crystallized from EtOH, BuOH, dioxane, PhCl, or AcOH gave 1.7 g. 3-benzyl-4-hydroxy-6-piperonyl-2-pyrone, m. 266°.

IT 108717-22-2P, Carbostyryl, 6-acetyl-3-benzyl-4-hydroxy-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 108717-22-2 CAPLUS  
 CN Carbostyryl, 6-acetyl-3-benzyl-4-hydroxy- (6CI) (CA INDEX NAME)



L28 ANSWER 218 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1959:23304 CAPLUS  
 DOCUMENT NUMBER: 53:23304  
 ORIGINAL REFERENCE NO.: 53:4272b-i, 4273a-b  
 TITLE: Synthesis of heterocycles. XI. 4-Hydroxy-2-pyrones  
 AUTHOR(S): Ziegler, E.; Junek, H.  
 CORPORATE SOURCE: Univ. Graz, Austria  
 SOURCE: Monatshefte fuer Chemie (1958), 89, 323-30  
 CODEN: MOCMB7; ISSN: 0026-9247  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 OTHER SOURCE(S): CASREACT 53:23304  
 GI For diagram(s), see printed CA Issue.  
 AB cf. C.A. 52, 17253c. Aryl alkyl ketones were treated with PhCH<sub>2</sub>CH(CO<sub>2</sub>C<sub>6</sub>H<sub>3</sub>Cl<sub>2</sub>-2,4)<sub>2</sub> (I) at about 250° to give 3-benzyl-4-hydroxy-2-pyrones which were easily debenzylated with AlCl<sub>3</sub>. The mechanism of this reaction is discussed. PhAc (6 g.) and 12 g. I heated 2.5 hrs. at 250°, the melt cooled, rubbed 1st with petr. ether (II) and then with C<sub>6</sub>H<sub>6</sub>, and the solid (3.5 g.) crystallized from CHCl<sub>2</sub>CHCl<sub>2</sub> (III) or PhNO<sub>2</sub> gave 3-benzyl-4-hydroxy-6-phenyl-2-pyrone (IV), m. 253-4° (Ac derivative, m. 122-3°). IV (4.4 g.) and 8.2 g. AlCl<sub>3</sub> heated 10 min. at 160°, the melt decomposed, dissolved in aqueous NaOH, and the soluble product crystallized from PhNO<sub>2</sub> gave 1.6 g. 4-hydroxy-6-phenyl-2-pyrone (V), m. 245°; the alkaline insol. material was identified as anthracene; some impure phenanthrene was also obtained. V (0.4 g.) in 10 ml. hot 1:1 EtOH-AcOH treated with 5 ml. aqueous CH<sub>2</sub>O gave

3,3'-methylenebis(4-hydroxy-6-phenyl-2-pyrone), m. 262-3° [PhCl, xylene, dioxane (VI)-H<sub>2</sub>O]. V (0.6 g.) and 1.6 g. I heated 1 hr. at 250°, the melt cooled, rubbed with C<sub>6</sub>H<sub>6</sub> and EtOH, and the solid (0.7 g.) crystallized from AcOH or PhMe gave

3'-benzyl-4'-hydroxy-6-phenyl-(1,2-pyrono[5',6':3,4]-2-pyrone) (VII), m. 252-3°. PhAc (4.8 g.) and 15.4 g. CH<sub>2</sub>(CO<sub>2</sub>C<sub>6</sub>H<sub>3</sub>Cl-2,4) (VIII) heated 30 min. at 250°, the melt cooled, rubbed with EtOH and C<sub>6</sub>H<sub>6</sub>, vacuum sublimed, and crystallized from AcOH, PhCl, xylene, or VI-H<sub>2</sub>O gave 1 g. 4'-hydroxy-6-phenyl(1,2-pyrono[5',6':-3,4]-2-pyrone) (IX), m. 249-50°. V (0.5 g.) and 1 ml. CH<sub>2</sub>(COCl)<sub>2</sub> in 3 ml. III heated 15 min. at 110° gave IX. V (1 g.) and 2.5 g. VIII heated 1 hr. at 250° gave IX. VII (0.35 g.) and 0.4 g. AlCl<sub>3</sub> heated 5 min. at 160° gave 0.2 g. IX, m. 249-50°. V (1.2 g.), 10 ml. Ac<sub>2</sub>O, and 2 drops concentrated H<sub>2</sub>SO<sub>4</sub> heated 1 hr. at 140°, cooled, and the solid crystallized from AcOH or C<sub>6</sub>H<sub>6</sub> gave dehydrobenzoylacetic acid (X), m. 170°. X was also obtained by heating 5 moles PhAc and 2 moles CH<sub>2</sub>(CO<sub>2</sub>Ph)<sub>2</sub> several hrs. PhCH(CO<sub>2</sub>Ph)<sub>2</sub> (6.6 g.) and 4.8 g. PhAc heated 1 hr. at 250°, cooled, rubbed with EtOAc, the product treated with hot EtOH, and the residue (1 g.) crystallized from PhNO<sub>2</sub> gave 3,6-diphenyl-4-hydroxy-2-pyrone, m. 312-13° (Ac derivative, m. 140-1°). p-ClC<sub>6</sub>H<sub>4</sub>Ac (4 g.) and 6 g. I heated 1 hr. at 250°, the solid rubbed 1st with II and then C<sub>6</sub>H<sub>6</sub>, and crystallized from III gave 2.2 g. 3-benzyl-4-hydroxy-6-(p-chlorophenyl)-2-pyrone (XI), m. 262-3°. XI (1 g.) and 1.6 g. AlCl<sub>3</sub> heated 5 min. at 160° gave 0.55 g. 4-hydroxy-6-(p-chlorophenyl)-2-pyrone, m. 292° (decomposition) (PhNO<sub>2</sub>). BzCH<sub>2</sub>Cl (1.5 g.) and 2.4 g. I heated 1 hr. at 250°, cooled, and the solid rubbed with II or C<sub>6</sub>H<sub>6</sub> and then with EtOH gave 0.7 g. 3-benzyl-4-hydroxy-5-chloro-6-phenyl-2-pyrone, 201° (AcOH or PhMe). BzEt (2.7 g.) and 4.8 g. I heated 30 min. at 250° and then 30 min. at 280°, the crude product dissolved in C<sub>6</sub>H<sub>6</sub> and precipitated with II, and crystallized from AcOH or C<sub>6</sub>H<sub>6</sub> gave 2 g.

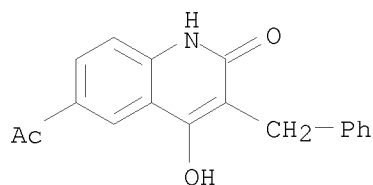
3-benzyl-4-hydroxy-5-methyl-6-phenyl-2-pyrone, m. 162-3°. BzCH<sub>2</sub>Ph (1 g.) and 2.88 g. I heated 90 min. at 200° and the crude product (0.7 g.) crystallized from MeOH gave 3-benzyl-4-hydroxy-5,6-diphenyl-2-pyrone, m. 206-7°. MeC: CH.CO.CH<sub>2</sub>.CO.O (0.63 g.) and 2.4 g. I heated 20 min. at 250°, rubbed with C<sub>6</sub>H<sub>6</sub>, and the crude product (1 g.) crystallized from PhNO<sub>2</sub>, AcOH, or VI gave 3'-benzyl-4'-hydroxy-6-methyl(pyrono[5',6':3,4]-2-pyrone), m. 225-6°. 2,4-(HO)2C<sub>2</sub>H<sub>8</sub>Ac (1.5 g.) and 2.4 g. I heated 30 min. at 250°, the melt (1.2 g.) rubbed with EtOH, and crystallized from VI and then from PhCl gave 0.2 g. 3-benzyl-4-hydroxy-6-(2,4-dihydroxyphenyl)-2-pyrone, m. 253-5° (Ac derivative, m. 162-3°); the VI filtrate treated with H<sub>2</sub>O and the precipitate crystallized from AmOAc or AcOH gave 0.8 g.

3-benzyl-4,7-dihydroxy-6-acetylcoumarin, m. 250-1° (di-Ac derivative, m. 159-60°). p-HO-C<sub>6</sub>H<sub>4</sub>Ac (1.36 g.) and 2.4 g. I heated 1 hr. at 250°, the melt treated with C<sub>6</sub>H<sub>6</sub>, the precipitate filtered off, and crystallized from PhNO<sub>2</sub> gave 0.2 g. 3-benzyl-4-hydroxy-6-acetylcoumarin, m. 277-8° (Ac derivative, m. 184°). p-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>Ac (1.1 g.) and 1.7 g. I heated 30 min. at 250% the solid rubbed with C<sub>6</sub>H<sub>6</sub>, washed with EtOH, and crystallized from a large volume of PhNO<sub>2</sub> gave 3-benzyl-4-hydroxy-6-acetylcarbonyl, m. 316-17°.

IT 108717-22-2P, Carbostyryl, 6-acetyl-3-benzyl-4-hydroxy-  
RL: PREP (Preparation)  
(preparation of)

RN 108717-22-2 CAPLUS

CN Carbostyryl, 6-acetyl-3-benzyl-4-hydroxy- (6CI) (CA INDEX NAME)



L28 ANSWER 219 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1958:92894 CAPLUS  
 DOCUMENT NUMBER: 52:92894  
 ORIGINAL REFERENCE NO.: 52:16361f-i,16362a-h  
 TITLE: Quinoxalone studies, 2-styryl-3-quinoxalone  
 AUTHOR(S): Bodforss, Sven  
 CORPORATE SOURCE: Univ. Lund, Swed.  
 SOURCE: Justus Liebigs Annalen der Chemie (1957), 609, 103-25  
 CODEN: JLACBF; ISSN: 0075-4617  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable

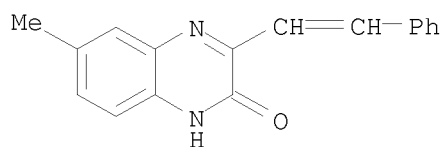
AB cf. C.A. 21, 2902. The reaction product from  $\text{PhCH:CHCOC}_2\text{H}$  (I) and  $\text{o-C}_6\text{H}_4(\text{NH}_2)_2$  (II) was shown to be 2-styryl-3-quinoxalone (III). I and II in alc. gave tars, but in 50% alc. HOAc gave 70% III, m.  $253^\circ$ . Similarly, the following 2-substituted 3-quinoxalones were prepared: 4-methoxystyryl (IV), m.  $250^\circ$ ; 3-nitrostyryl (V), m.  $262^\circ$  (decomposition); 4-nitrostyryl, m.  $305^\circ$  (also prepared from 2-methyl-3-quinoxalone (VI) and p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHO); 2-chlorostyryl, m.  $250^\circ$ ; 4-chlorostyryl, m.  $275^\circ$ ; phenethyl, m.  $214^\circ$  (also prepared from III with Na-Hg). II and o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH:CHCOC<sub>2</sub>H in hot alc. gave 1,2-dihydro-2-hydroxy-2-(2-nitrostyryl)-3-quinoxalone, m.  $195^\circ$ , which in hot HOAc lost H<sub>2</sub>O to give 2-(2-nitrostyryl)-3-quinoxalone, m.  $265^\circ$  (decomposition). I and o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>NHPh in 5% alc. HOAc gave 2-styryl-4-phenyl-3-quinoxalone (VII), m.  $180^\circ$ . 2-(2-Nitrostyryl)-4-phenyl-3-quinoxalone, m.  $203^\circ$ , was prepared similarly. I and 2,4-(H<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>Me gave 6 (and/or 7)-methyl-2-styryl-3-quinoxalone (VIII), m.  $245-9^\circ$ . III and Br in HOAc gave 2-(1,2-dibromo-2-phenylethyl)-3-quinoxalone (IX), m.  $255^\circ$  (decomposition), also prepared from II and Ph(CHBr)<sub>2</sub>COCOC<sub>2</sub>H. Similar bromination gave IV dibromide, m.  $165^\circ$  (decomposition), V dibromide, m.  $240^\circ$  (decomposition), VII dibromide, m.  $240^\circ$  (decomposition), and VIII dibromide, m.  $125^\circ$  (decomposition). The bromination apparently proceeds by complex formation with Br, since VI and Br gave an unstable dibromo compound decompose about  $240^\circ$ . I and Cl in HOAc-CCl<sub>4</sub> gave III dichloride (X), m.  $206^\circ$  (heated rapidly), also obtained from I and NaNO<sub>2</sub> in concentrated HCl. [I and NaNO<sub>2</sub> in HOAc gave 2-(1,2-dioximino-2-phenylethyl)-3-quinoxalone, m.  $229^\circ$  (decomposition)]. Fusion of X gave 2-( $\alpha$ -chlorostyryl)-3-quinoxalone (XI), m.  $229^\circ$ , which when refluxed in concentrated NaOH gave 2-phenacyl-3-quinoxalone (XII), m.  $266^\circ$  (also obtained from II and BzCH<sub>2</sub>COCOC<sub>2</sub>H). Similarly, fusion of IX gave 2-( $\alpha$ -bromostyryl)-3-quinoxalone, m.  $191^\circ$ , better prepared from IX and Ag<sub>2</sub>SO<sub>4</sub> in concentrated H<sub>2</sub>SO<sub>4</sub>. IX and wet C<sub>5</sub>H<sub>5</sub>N gave III, but

40 g. dry IX heated 30 min. in well-dried C<sub>5</sub>H<sub>5</sub>N gave 26 g. 2-[ $\alpha$ -(1-pyridyl)styryl]-3-quinoxalone bromide (XIII), m.  $265^\circ$ , which gave ppts. with NaClO<sub>4</sub>, KI, KSCN, K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, HgCl<sub>2</sub>, o-HOC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Na, 3-HOC<sub>10</sub>H<sub>6</sub>CO<sub>2</sub>Na, and Na<sub>2</sub>SO<sub>3</sub> (but not NaHSO<sub>3</sub>). XIII and Br in HOAc gave an insol. tribromide (XIV). Solid XIII and excess NaOH gave the corresponding hydroxide (XV), decompose  $188^\circ$ . The structure of XIII was proved by its conversion to XII by concentrated HBr.

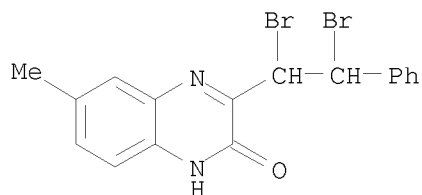
Fusion of XIII gave  $C_5H_5N.HBr$  and 3-phenylfuroquinoxaline (XVI), m.  $196^\circ$ , also obtained from XV and  $H_2SO_4$  in  $Ac_2O$ , from XII and concentrated  $H_2SO_4$ , from XI or XIII and  $NaOH$ , or from IX and  $Et_3N$  in  $PhNO_2$ . XVI and Br in  $HOAc$  gave 4-bromo-3-phenylfuroquinoxaline, m.  $175^\circ$ , also obtained by fusion of XIV. XIII and Zn in  $HOAc$  gave 2-phenylethyl-3-quinoxalone, while XIII and  $KMnO_4$  in  $Me_2CO$  gave 2,3-dihydroxyquinoxaline and  $BzOH$ . XV is believed to exist in aqueous solution as an open chain tautomer,

i.e.  $RCH:CPH_NHCH:CHCH:CHCHO$  or an isomer  $[R = 2-(3-oxoquinoxalyl)]$  since with  $Me_2CO$  and alkali an unstable red dye (isolated as the  $HClO_4$  or  $HBr$  salt) was obtained, believed to be  $RCH:CPH_NHCH:CHCH:CHCH:CHAc$ . No such dye was obtained with any quaternary salt not containing the quinoxaline ring. By similar reactions the following substituted XIII were prepared: 2-(4-methoxystyryl); 2-(3-nitrostyryl), decompose  $290^\circ$ ; 2-(4-nitrostyryl) (perchlorate), decompose  $300^\circ$ ; 4-phenyl-2-styryl (perchlorate); 6(or 7)-methyl-2-styryl, m.  $295^\circ$ . The use of substituted pyridines gave the following derivs. of XIII: 3-picolinium perchlorate, m.  $255^\circ$ ; isoquinolinium bromide, m.  $270^\circ$ . X and quinoline, followed by alc. and  $AcOH$  gave 2- $\alpha$ -ethoxy- $\beta$ -(1-quinolyl)styryl-3-quinoxalone chloride, m.  $330^\circ$  (decomposition), which with concentrated  $H_2SO_4$  gave the acid sulfate, m.  $300^\circ$  (decomposition). XV and  $N_2H_4.H_2O$  gave, with loss of  $C_5H_5N$ , 2-( $\alpha$ -hydrazinostyryl)-3-quinoxalone (or the tautomeric hydrazone) (XVII), decompose  $237^\circ$ . XVII with  $p-O_2NC_6H_4CHO$  and with  $AcCH_2CO_2Et$  gave the hydrazones, m.  $266^\circ$  and  $214^\circ$ , resp. XVII and  $Ac_2O$  gave an Ac derivative, m.  $280^\circ$ , which formed no hydrazones.  $BzCOCOC_2Et$  and II gave 2-phenacyl-3-quinoxalone (XVIII), m.  $266^\circ$ . Similar reactions gave 2-(4-methoxyphenacyl)-3-quinoxalone (XIX), m.  $249^\circ$ , and 2-phenacyl-4-phenyl-3-quinoxalone, m.  $205^\circ$ . XVIII and  $N_2H_4.H_2O$  gave 7,8-benzo-2,3-diaza-2,3-dihydro-4-phenylquinoxaline, m.  $315^\circ$ , which could not be obtained by cyclization of XVII. This is presumably because XVII has the trans and XVIII the cis configuration. XVIII and  $PhNHNH_2$  gave a phenylhydrazone, m.  $220^\circ$ , which when refluxed in  $HOAc$  gave 7,8-benzo-2,3-diaza-2,3-dihydro-2,4-diphenylquinoxaline, m.  $237^\circ$ . XV and  $Et_2NH$ ,  $(CH_2NH_2)_2$ , or  $HOCH_2CH_2NH_2$  gave 2-( $\alpha$ -iminostyryl)-3-quinoxalone (or the amine tautomer), m.  $271^\circ$ , which gave no reaction with  $EtI$  or  $MeI$ , but gave with  $Me_2SO_4$  a red, intensely orange fluorescing quaternary salt, m.  $180^\circ$ . The color indicates quaternization of the quinoxaline N. XIX in refluxing  $Ac_2O$  gave 3-(4-methoxyphenyl)furoquinoxaline, m.  $210^\circ$ . 3-(4-Tolyl)furoquinoxaline, m.  $222^\circ$ , and XVI were similarly prepared. IX and  $KOAc$  refluxed in alc. gave 2-phenylacetyl-3-quinoxalone, m.  $218^\circ$ , giving a red  $FeCl_3$  reaction and a precipitate with  $Cu(OAc)_2$ . III and  $(NCS)_2$  in  $CHCl_3-CCl_4$  gave a dithiocyanate, decompose  $228^\circ$ .

IT 108981-54-0 109251-47-0  
 (Derived from data in the 6th Collective Formula Index (1957-1961))  
 RN 108981-54-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-methyl-3-styryl- (6CI) (CA INDEX NAME)



RN 109251-47-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3-( $\alpha,\beta$ -dibromophenethyl)-6-methyl- (6CI)  
 (CA INDEX NAME)



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ACCESSION NUMBER: 1958:92893 CAPLUS

DOCUMENT NUMBER: 52:92893

ORIGINAL REFERENCE NO.: 52:16360h-i,16361a-f

TITLE: Cinnolines. IV. Synthesis of 3-acetyl- and 3-carbethoxycinnolines

AUTHOR(S): Baumgarten, Henry E.; Anderson, Charles H.

CORPORATE SOURCE: Univ. of Nebraska, Lincoln

SOURCE: Journal of the American Chemical Society (1958), 80, 1981-4

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB KOH (7.7 g.) in 200 cc. H<sub>2</sub>O treated with stirring with 15.5 g. AcCH<sub>2</sub>CO<sub>2</sub>Et, stirred 4 hrs., and allowed to stand 20 hrs., 14 g. damp, crude o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHO, 8.3 g. NaNO<sub>2</sub>, and 250 cc. iced H<sub>2</sub>O slurried in a Waring blender, the slurry treated with 25 cc. concentrated HCl and 150 g. crushed ice, blended about 5 min. while being treated with crushed ice, and filtered, the filtrate added during 15 min. at 0° to a mixture of the AcCH<sub>2</sub>CO<sub>2</sub>K solution, 15 cc. concentrated HCl, and 35 cc. H<sub>2</sub>O, neutralized with NaOAc, kept 2 hrs. at room temperature, and filtered, and the residue recrystd. from 25% EtOH or Skellysolve C gave 3.7 g. 3-acetylcinnoline (X), pale yellow needles, m. 155-6°. X (1 g.) in 6 cc. concentrated H<sub>2</sub>SO<sub>4</sub> treated at room temperature with 0.4 g. NaN<sub>3</sub> in small portions during 1 hr., kept overnight, poured with stirring onto 12 g. crushed ice, heated 15 hrs. on the steam bath, neutralized with 33% aqueous KOH, and filtered, the filtrate extracted with Et<sub>2</sub>O, the extract evaporated, and the residue recrystd. from hot C<sub>6</sub>H<sub>6</sub> gave 0.08 g. III, m. 163-4.5°. The diazonium salt solution from 20 g. damp, crude o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHO, 14.2 g. NaNO<sub>2</sub>, 250 cc. iced H<sub>2</sub>O, 42 cc. concentrated HCl, and 150 g. crushed ice blended in a Waring blender and added during 15 min. to 34 g. EtO<sub>2</sub>CCH<sub>2</sub>CO<sub>2</sub>K in 400 cc. H<sub>2</sub>O at 0°, the mixture neutralized slowly with 25 cc. concentrated HCl in 50 cc. H<sub>2</sub>O and then with NaOAc, warmed during 2 hrs. to room temperature, heated to 60°, cooled, decanted from some tar, and extracted with Et<sub>2</sub>O, the extract evaporated, and the residual oil and the tar combined, refluxed with Skellysolve B, filtered, and cooled yielded 3.4 g. 3-carbethoxycinnoline (XI), m. 97-7.5°. The diazonium salt solution from 18 g. damp, crude 5,2-Cl(H<sub>2</sub>N)C<sub>6</sub>H<sub>4</sub>CHO, 11.6 g. NaNO<sub>2</sub>, 250 cc. iced H<sub>2</sub>O, 35 cc. concentrated HCl, and 150 g. crushed ice added during 15 min. to aqueous AcCH<sub>2</sub>CO<sub>2</sub>H (from 0.17 mole AcCH<sub>2</sub>CO<sub>2</sub>Et), neutralized with NaOAc, heated to 75°, cooled, and filtered gave 7 g. crude 4,2-Cl(OHC)C<sub>6</sub>H<sub>3</sub>NHN:CHAc (XII). m. 143-75° (Skellysolve C), which washed with 10% HCl, dried, and recrystd. from Skellysolve C gave 6.0 g. 6-Cl derivative of X, m. 206-7°. A similar diazonium salt solution added during 15 min. to 0.17 mole EtO<sub>2</sub>CCH<sub>2</sub>CO<sub>2</sub>H at 0°, neutralized with NaOAc, heated to 75°, cooled, and filtered gave 3.8 g. crude product which washed with 10% HCl and recrystd. from Skellysolve C gave 2 g. 6-Cl derivative of X, yellow needles, m. 152.5-53°. A diazonium salt solution from crude



4,2-Cl(H2N)C6H3CHO (from 0.15 mole 4,2-Cl(O2N)C6H3CHO], 10.4 g. NaNO2, 250 cc. iced H2O, 32 cc. concentrated HCl, and 150 g. crushed ice added during 15 min. to aqueous AcCH2CO2H (from 0.15 mole AcCH2CO2Et), neutralized with NaOAc, heated to 75°, and cooled gave 6.5 g. 5-Cl isomer (XIII) of XII, pale yellow needles, m. 140-1° (Skellysolve C). XIII (1.0 g.) in 50 cc. cold concentrated H2SO4 kept overnight, poured onto crushed ice, and filtered, the filtrate neutralized with NaOAc and refiltered, and the combined residues recrystd. from Skellysolve C gave 0.36 g. 7-Cl derivative of X, pale yellow needles, m. 211-12°. A similar run using 50 cc. 20% HCl instead of H2SO4 stirred 4-24 hrs. on the steam bath and worked up in the usual manner gave a mixture of cyclized and uncyclized material. A diazonium salt solution from 4,2-Cl(H2N)C6H3CHO added during 15 min. at 0° to 0.15 mole aqueous EtO2CCH2CO2H, neutralized with NaOAc, heated to 75°, and cooled gave 2.3 g. 5,2-Cl(OHC)C6H3NHN:CHCO2Et, yellow needles, m. 79-80° (Skellysolve C), which could not be cyclized with dilute HCl or with concentrated H2SO4. A duplicate run gave 2.5 g.

mixture of

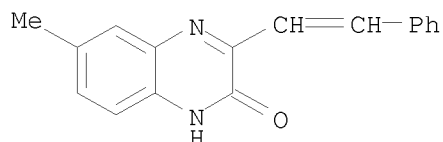
cyclized and uncyclized material which repeatedly from Skellysolve C gave 0.4 g. 7-Cl derivative of XI, yellow needles, m. 200-1°.

IT 108981-54-0 109251-47-0

(Derived from data in the 6th Collective Formula Index (1957-1961))

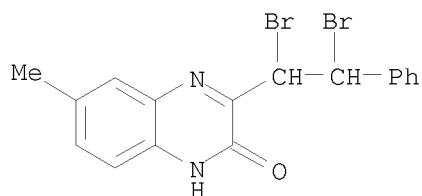
RN 108981-54-0 CAPLUS

CN 2(1H)-Quinoxalinone, 6-methyl-3-styryl- (6CI) (CA INDEX NAME)



RN 109251-47-0 CAPLUS

CN 2(1H)-Quinoxalinone, 3-( $\alpha,\beta$ -dibromophenethyl)-6-methyl- (6CI)  
(CA INDEX NAME)



L28 ANSWER 221 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1956:44595 CAPLUS

DOCUMENT NUMBER: 50:44595

ORIGINAL REFERENCE NO.: 50:8642g-i,8643a-c

TITLE: The preparation and cyclization of substituted acetoacetanilides

AUTHOR(S): Searles, A. Langley; Kelly, Richard J.

CORPORATE SOURCE: New York Univ., New York, NY

SOURCE: Journal of the American Chemical Society (1955), 77, 6075-6

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

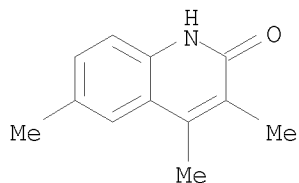
OTHER SOURCE(S): CASREACT 50:44595

AB The following PhNHCOCHRAc were prepared by published methods (R, m.p., and % yield given): 2-PhCH<sub>2</sub>CH<sub>2</sub>, 101.5-102°, 35; p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 141-3° (from C<sub>6</sub>H<sub>6</sub>-EtOH), 65; iso-Pr, 139-40° (from aqueous MeOH), 81; cyclopentyl, 150.5-1.5°, 67; Am, 72-3° (from petr. ether), 72; C<sub>6</sub>H<sub>13</sub>, 70-1°, 85 (unstable form, m. 55-6°); C<sub>7</sub>H<sub>15</sub>, 64-6° (from petr. ether), 58; 2,5-Me(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>-NHCOCH<sub>2</sub>Ac, 119-19.5°, 72 (straw-colored rods which gave a magenta solution with aqueous alc. FeCl<sub>3</sub>); o-ClC<sub>6</sub>H<sub>4</sub>NH-COCHMeAc, 94-4.5°, 48; p-MeC<sub>6</sub>H<sub>4</sub>NHCOCHMeAc, 88-9° (from petr. ether), 65; o-MeC<sub>6</sub>H<sub>4</sub>NHCOCHMeAc, 109.5-11° (with emollescence), 60; o-PhC<sub>6</sub>H<sub>4</sub>NHCOCHMeAc, 115-15.5°, 77. PhCH<sub>2</sub>CHAcCONHPh (4.0 g.) heated 0.5 h. at 96° with 50 cc. 74% H<sub>2</sub>SO<sub>4</sub>, the mixture poured into 200 cc. cold H<sub>2</sub>O, the precipitate filtered, washed with cold H<sub>2</sub>O, and recrystd. from EtOH-C<sub>6</sub>H<sub>6</sub> gave 3-benzyl-4-methylcarbostyryl (I), white needles, m. 238-40°; the mother liquor concentrated and refrigerated gave addnl. 3.3 g. I. o-MeC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CHAcCONHPh (2.0 g.) and 40 cc. 74% H<sub>2</sub>SO<sub>4</sub> heated 1.5 h. on the steam bath with occasional stirring, the mixture poured into H<sub>2</sub>O and crushed ice, stirred briefly, and filtered, the cake suspended in 300 cc. cold H<sub>2</sub>O and allowed to stand 36 h., and the pale tan solid filtered, dried (1.7 g.) and triturated with three 20-cc. portions 1:1 Et<sub>2</sub>O-Me<sub>2</sub>CO, and the residue recrystd. twice from aqueous EtOH gave 3-benzyl-4,8-dimethylcarbostyryl, clusters of white needles, m. 226.5-7.5°. o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>Ph (33.8 g.) in 300 cc. dry refluxing xylene treated with 1 cc. pyridine and 41.6 g. AcCH<sub>2</sub>CO<sub>2</sub>Et while removing the volatile material which boiled below 80°, after 1 h. 220 cc. liquid distilled off during 0.5 h., the residual solution refrigerated, and the pale straw-colored deposit (44.7 g.) washed with cold petr. ether and recrystd. from 50% aqueous EtOH gave 42.1 g. o-PhC<sub>6</sub>H<sub>4</sub>NHCOCH<sub>2</sub>Ac (II), white needles, m. 83.5-85°. II (1.27 g.), 1.3 g. P<sub>2</sub>O<sub>5</sub>, and 25 cc. xylene refluxed 1 h., the mixture cooled, diluted with H<sub>2</sub>O, neutralized with KOH, and steam distilled, the residual mixture refrigerated and filtered, and the orange precipitate leached with three 5-cc. portions Me<sub>2</sub>CO and recrystd. twice from aqueous EtOH with C gave 0.100 g. 8-phenyl-4-methylcarbostyryl, colorless needles, m. 224.5-25°. Similarly were prepared the following 3-substituted-4-methyl-carbostyryls (3-substituent, m.p., and % yield given): Ph-(CH<sub>2</sub>)<sub>2</sub>, 211-11.5°, 25; p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 294-6°, 81; iso-Pr, 244-5°, 77; Am, 163-4.5° (with emollescence), 68; C<sub>6</sub>H<sub>13</sub>, 154-4.5° (from aqueous MeOH), 82; C<sub>7</sub>H<sub>15</sub>, 161.5-3.5°, 89; 3-ethyl-4,8-dimethylcarbostyryl, 192.5-93° (with emollescence), 63; 8-chloro-3,4-dimethylcarbostyryl, 208-9°, 80; 3,4,6-trimethylcarbostyryl, 277-7.5°, 91; 3,4,8-trimethylcarbostyryl, 216.5-17.5° (from C<sub>6</sub>H<sub>6</sub>), 71; 8-Me derivative of I, 226.5-7.5°, 91.

IT 854827-24-0P, Carbostyryl, 3,4,6-trimethyl-  
RL: PREP (Preparation)  
(preparation of)

RN 854827-24-0 CAPLUS

CN 2(1H)-Quinolinone, 3,4,6-trimethyl- (CA INDEX NAME)



ORIGINAL REFERENCE NO.: 49:8280g-i,8281a-i,8282a-i,8283a-h  
TITLE: Heterocyclic quinones. I. The direct oxidation of  
6-hydroxycarbostryls to carbostryl-5,6-quinones  
AUTHOR(S): Holmes, Richard R.; Conrady, James; Guthrie, James;  
McKay, Robert  
CORPORATE SOURCE: Univ. of N. Dakota, Grand Forks  
SOURCE: Journal of the American Chemical Society (1954), 76,  
2400-7  
CODEN: JACSAT; ISSN: 0002-7863  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
OTHER SOURCE(S): CASREACT 49:42970

AB 4-Methyl-6-hydroxycarbostryl (I) was oxidized in good yield with CrO<sub>3</sub> or Pb(OAc)<sub>4</sub> to 4-methylcarbostryl-5,6-quinone (II). Dry HCl added to II with the formation of 4-methyl-5,6-dihydroxy-8-chlorocarbostryl (III). III formed a di-Ac derivative (IV) with Ac<sub>2</sub>O but a tri-Bz derivative (V) with BzCl in pyridine. The oxidation of III with CrO<sub>3</sub> led to 4-methyl-8-chlorocarbostryl-5,6-quinone (VI). The proof of structure of these substances by synthesis of an authentic sample of III by an unequivocal method is described. II was reduced catalytically to 4-methyl-5,6-dihydroxycarbostryl (VII) but gave with aqueous Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub> H<sub>2</sub>O-soluble products. In contrast to 1,2-naphthoquinone, which gave a 3-nitro derivative with concentrated HNO<sub>3</sub>, III is unaffected by this reagent. The preparation of 6-hydroxycarbostryl (VIII) by a new method and of 3-butyl-4-chloro-6-hydroxycarbostryl (IX) is described. VIII and IX were oxidized directly with CrO<sub>3</sub> to carbostryl-5,6-quinones. The question of the correct choice between 2 possible tautomeric structures for the carbostrylquinones is discussed, and the arguments based upon the bright red color, IR spectrum, and mode of the addition of HCl are presented, indicating that these substances are correctly formulated as carbostryl-5,6-quinones. Glacial AcOH (100 cc.), 150 cc. 48% HBr, and 30 g. 4-methyl-6-methoxycarbostryl refluxed 12 h., the solution diluted with 150 cc. H<sub>2</sub>O, the resulting white needles of I.HBr stirred 2 h. with warming with 500 cc. 5% NH<sub>4</sub>OH, and the free base recrystd. from glacial AcOH gave 23 g. (81%) I, beautiful white blades, m. 326-30° (recrystd. from glacial AcOH, HCONMe<sub>2</sub>, and AcOH, m. 330-2°) (all m.ps. are corrected). The attempted oxidation of I with dry Pb(OAc)<sub>4</sub> in CHCl<sub>3</sub> or C<sub>6</sub>H<sub>6</sub> gave only dark gums; I with dried Pb oxide in boiling Et<sub>2</sub>O gave a faintly yellowish solution but only unchanged I was isolated. I (1.5 g.), powdered and shaken 0.5 h. with 10 cc. 1:1 warm Ac<sub>2</sub>O-AcOH containing 8.0 g. Pb(OAc)<sub>4</sub>, the orange solid filtered off, boiled with 10 cc. AcOH, filtered hot, and the resulting tiny orange-red crystals (0.75 g., 47%) recrystd. from hot AcOH gave II, bright red plates, decomposing at about 180° and above, without melting. I (20.0 g.) suspended in 200 cc. AcOH and 100 cc. H<sub>2</sub>O, the mixture treated with 20 g. concentrated H<sub>2</sub>SO<sub>4</sub>, warmed, the resulting solution cooled to 40°, treated with vigorous shaking with 15.0 g. CrO<sub>3</sub> in 20 cc. H<sub>2</sub>O, cooled rapidly after 2 min., and the resulting red gleaming plates (11.0 g., 51%) filtered, washed with H<sub>2</sub>O and AcOH, dried, and recrystd. from AcOH gave II. II could not be recrystd. satisfactorily more than once; it dissolved readily in concentrated H<sub>2</sub>SO<sub>4</sub> in the cold, but the deep red color of the solution soon faded to yellow; the yellow H<sub>2</sub>SO<sub>4</sub> solution poured into H<sub>2</sub>O did not give any precipitate II also readily dissolved in cold. concentrated 70% HNO<sub>3</sub>; this solution diluted after a few min. with an equal volume of ice water and cooled deposited nicely crystallized II. II suspended in EtOH shaken with aqueous Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub> at room temperature gave a colorless solution from which nothing precipitated on further dilution with H<sub>2</sub>O. II gave with concentrated NH<sub>4</sub>OH a clear, green solution which

rapidly darkened in air and deposited after some time a purple, amorphous precipitate II with  $\text{SnCl}_2$  or with Zn dust in AcOH gave a white insol. powder, m.

above  $330^\circ$  (decomposition). Powdered II (2.0 g.) in 100 cc. EtOH hydrogenated at  $26^\circ/740$  mm. over 0.2 g.  $\text{PtO}_2$  (prerduced) until 275 cc. H was absorbed, the filtrate diluted with 100 cc.  $\text{H}_2\text{O}$ , allowed to stand 24 h. at room temperature, the resulting gray solid deposit (1.0 g., 47%) boiled

10 min. with 5 cc. AcOH and 3 cc.  $\text{Ac}_2\text{O}$ , and the mixture diluted with  $\text{H}_2\text{O}$  until turbid and cooled yielded 0.87 g. (60%) VII, colorless blades, m.  $283^\circ$  (recrystd. 4 times from aqueous AcOH). VII shaken with concentrated  $\text{NH}_4\text{OH}$  gave a green solution which quickly darkened and then deposited a purple gelatinous solid. Dry HCl bubbled through 5.0 g. II suspended in 50 cc.  $\text{CHCl}_3$ , the resulting yellowish powder shaken with dilute aqueous  $\text{NaHCO}_3$ , the white solid (5.1 g., 89%), m. indistinctly with decomposition above  $380^\circ$  (insol. in all solvents), treated with 300 cc. boiling HCl and 700 boiling glacial AcOH, and the yellow solution cooled deposited 4.2 g. III.  $\text{HCl} \cdot 2\text{H}_2\text{O}$ , bright lemon-yellow needles, which, boiled with  $\text{H}_2\text{O}$ , gave III, white powder, m. indistinctly with decomposition above  $380^\circ$ . III was only very slightly soluble in all common solvents except pyridine, in which it turned black rapidly; it could not be methylated with  $\text{Me}_2\text{SO}_4$  and alkali. III (2.0 g.) boiled with 20 cc.  $\text{Ac}_2\text{O}$  containing 2 drops  $\text{H}_2\text{SO}_4$  and the resulting clear solution cooled deposited 2.11 g. (67%) IV, rosettes of white needles, m.  $245-50^\circ$  (recrystd. several times from  $\text{H}_2\text{O}$ , m.  $260-1^\circ$ ). III (1.0 g.) refluxed 15 min. with 3 g.  $\text{BzCl}$  and 25 cc. pyridine, the solution cooled slowly, and the crystalline solid recrystd. from AcOH yielded 0.9 g. (39%) V, m.  $240-2^\circ$ . III could not be oxidized with  $\text{CrO}_3$  or  $\text{FeCl}_3$  in aqueous AcOH. III (1.0 g.) suspended in 5 cc. EtOAc treated with 0.5 g.  $\text{CrO}_3$  in 1 cc.  $\text{H}_2\text{O}$ , and the resulting red crystals (0.95 g., 96%) dissolved in cold concentrated  $\text{HNO}_3$  and diluted with  $\text{H}_2\text{O}$  gave VI,

brilliant red crystals. 3,4-(MeO) $2\text{C}_6\text{H}_3\text{NO}_2$  (1.6 g.) suspended in 20 cc. concentrated HCl and shaken with 2.0 g. granulated Zn, the mixture heated 40 min.

on the steam bath with frequent shaking, the clear hot solution decanted, allowed to stand 4 h. at room temperature, the deposited crystalline  $\text{SnCl}_4$  removed,

dissolved in 25 cc. hot 15% aqueous NaOH, the solution cooled and the precipitate

recrystd. from hot  $\text{H}_2\text{O}$  gave 0.5 g. (38%) 3,4-(MeO) $2\text{C}_6\text{H}_3\text{NH}_2$  (X), white plates, m.  $86-7^\circ$ ; the mother liquors from the  $\text{SnCl}_4$  refrigerated 12 h., the solid deposit dissolved in 25 cc. hot 10% aqueous NaOH, and the solution

cooled yielded 0.5 g. (31%) 2,4,5-Cl(MeO) $2\text{C}_6\text{H}_2\text{NH}_2$  (XI), white leaflets, m.  $72-3^\circ$ . The N-Ac derivative of X (21 g.) in 150 cc.  $\text{CHCl}_3$  treated slowly at  $5-10^\circ$  with 8.2 g. Cl, the walls of the container scratched, the deposited N-Ac derivative (XII) of XI. HCl dissolved in the min. amount of boiling  $\text{H}_2\text{O}$ , and the solution cooled gave 22.8 g. (91 %) XII, m.  $127-9^\circ$  (recrystd. from hot  $\text{H}_2\text{O}$ , m.  $130-1^\circ$ ). XII (20 g.) refluxed 6 h. with 10% aqueous NaOH and the resulting product recrystd. from hot  $\text{H}_2\text{O}$  yielded 14 g. (86%) XI, m.  $72-3^\circ$  (recrystd. several times from  $\text{H}_2\text{O}$ , m.  $73-4^\circ$ ). X (25 g.) in 100 cc. ice water and 43 cc. concentrated HCl treated with 11.2 g.  $\text{NaNO}_2$  in 40 cc. cold  $\text{H}_2\text{O}$ , the mixture stirred 20 min. at  $0-5^\circ$ , added slowly with stirring at  $0^\circ$  to 0.2 mol  $\text{CuCl}$  in 78 cc. concentrated HCl, warmed to room temperature, then heated

gradually to  $60^\circ$ , the dark solution extracted with three 75-cc. portions of  $\text{C}_6\text{H}_6$ , and the extract distilled gave 17 g. (62%) 3,4-(MeO) $2\text{C}_6\text{H}_3\text{Cl}$  (XIII), colorless liquid, b<sub>739</sub>  $237-40^\circ$ . XIII (2.0 g.) nitrated by the method of Fetscher and Bogert (C.A. 33, 4252.5) yielded 2.3 g. (91%) 2,4,5-Cl(MeO) $2\text{C}_6\text{H}_2\text{NO}_2$  (XIV), pale yellow needles, m.  $118^\circ$ . XIV (1.0 g.) treated in 5 cc. 50% aqueous AcOH with 1.0 g. Zn dust, and the

resulting clear solution made strongly basic with 15% aqueous NaOH and chilled in ice deposited 0.3 g. (35%) XI, m. 72-3°. AcCH<sub>2</sub>CO<sub>2</sub>Et (100 cc.) treated at the b.p. with 25 g. pure XI in portions during 40 min., the solution refluxed gently 0.5 h., allowed to stand 24 h. at room temperature, and the white crystalline deposit (17 g., 47%) recrystd. from hot, 20% aqueous EtOH 3 times and then sublimed in vacuo gave pure 2,4,5-Cl(MeO)<sub>2</sub>C<sub>6</sub>H<sub>2</sub>NHCOCH<sub>2</sub>Ac (XV), white blades, m. 136-7°. XV (18 g.) in 75 cc. concentrated H<sub>2</sub>SO<sub>4</sub> (d. 1.84) allowed to stand 4 days at room temperature, the clear yellow solution poured with stirring into 700 cc. ice and H<sub>2</sub>O, the precipitate stirred 2 h. with hot 5% aqueous NaHCO<sub>3</sub>, filtered, boiled with 100 cc. 95% EtOH, filtered again, and the filtrate cooled slowly gave 4 crops of crystals; the 1st crop (1.7 g.) consisted of a mixture of a small amount of white powder and a larger amount of colorless blades; a sample of the colorless blades m. 165-7°; the white powder m. indistinctly with decomposition above 380°; the following crops consisted entirely of the colorless blades, m. 165-7°; the combined crystalline material (6.1 g., 36%) recrystd. 3 times from the min. volume of hot MeOH gave pure di-Me ether (XVI) of III, m. 167-8°; the alc. mother liquor from the recrystn. of XVI evaporated to dryness in vacuo and the residue (1.3 g.) recrystd. twice from MeOH yielded an addnl. 0.7 g. slightly less pure XVI, m. 163-6°; the material insol. in hot EtOH boiled with 50 cc. glacial AcOH, the hot suspension filtered, and the filtrate diluted with H<sub>2</sub>O gave a small amount of III, white powder, decomposed at about 380°. III boiled briefly with Ac<sub>2</sub>O and AcOH yielded IV, white needles, m. 260-1°, and gave with BzCl V, white needles, m. 240-2° (from AcOH). 2-Chloro-6-methoxyquinoline (XVII) (35 g.), refluxed 48 h. with 17 g. NaOMe in 300 cc. dry MeOH, and the mixture diluted with 300 cc. hot H<sub>2</sub>O yielded 31 g. (91%) 2,6-dimethoxyquinoline (XVIII), m. 85-8° (recrystd. twice from aqueous MeOH, m. 88-90°); refluxing XVII only 6 h. with NaOMe resulted in an incomplete reaction. XVIII (25 g.) refluxed 48 h. with 6N aqueous HCl, and the resulting solid product stirred with hot 10% NH<sub>4</sub>OH and recrystd. from AcOH yielded 20.4 g. (89%) 6-methoxycarbostyryl (XIX), m. 218-19° (recrystd. several times from AcOH, m. 218-19°). 6-Methoxyquinoline 1-oxide (17.3 g.) in 500 cc. H<sub>2</sub>O treated at 70° with stirring dropwise during 2 h. with 56 g. BzCl, the hot mixture filtered, and the solid stirred with hot 5% aqueous NaOH and recrystd. from AcOH yielded 8.3 g. (17%) of a compound C<sub>24</sub>H<sub>19</sub>NO<sub>5</sub>, small colorless prisms, m. 212-16° (recrystd. several times from AcOH and sublimed in vacuo, m. 227-9°), insol. in strong alkali (even hot), unaffected by refluxing 1 h. with 10% aqueous NaOH, and giving a yellow solution in warm 1:1 HCl. XIX (19 g.) refluxed 48 h. with 200 cc. 48% HBr, and the resulting white needles treated with H<sub>2</sub>O gave 15.4 g. (88%) VIII, m. 328-32° (recrystd. 3 times from AcOH and sublimed in vacuo, white needles, m. 337-9°). VIII (1.61 g.) boiled with 20 cc. 20% aqueous H<sub>2</sub>SO<sub>4</sub>, and the mixture cooled to room temperature and treated dropwise with vigorous shaking with 1.33 g. CrO<sub>3</sub> in H<sub>2</sub>O gave 0.90 g. (51%) carbostyryl-5,6-quinone (XX), red platelets. XX was destroyed by boiling with the higher-boiling solvents and was insol. in almost all of the common lower-boiling solvents except AcOH; boiling AcOH (150 cc.) dissolved approx. 0.5 g., and the solution allowed to stand several hrs. at room temperature deposited 0.3 g. XX, red platelets. XX suspended in EtOH, shaken a short time with aqueous Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub>, and the resulting colorless solution diluted with H<sub>2</sub>O did not give any precipitate XX gave in strong NH<sub>4</sub>OH a green solution which rapidly darkened and deposited a purple, gelatinous solid. XX (0.4 g.) in 5 cc. CHCl<sub>3</sub> treated with dry HCl, and the resulting yellow

solid boiled with H<sub>2</sub>O and then with 2 cc. glacial AcOH and filtered yielded 0.4 g. (83%) 5,6-dihydroxy-8-chlorocarbostyryl (XXI), white microcryst. powder, m. about 350° (decomposition), so little soluble in the common solvents that it could not be recrystd., soluble in aqueous alkali and

hot

pyridine, but the solns. rapidly turned black. XXI (0.2 g.) refluxed 10 min. with 1.0 cc. Ac<sub>2</sub>O and 3.0 cc. AcOH, the mixture diluted cautiously with 4.0 cc. H<sub>2</sub>O, and the solution cooled deposited 0.16 g. (60%) di-Ac derivative

of

XXI, m. 240-2° (from aqueous AcOH). BuCH(CO<sub>2</sub>Et)<sub>2</sub> (108 g.) and 62 g. p-MeOC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> refluxed 8 h. with 1 l. Dowtherm A, the mixture diluted with 500 cc. hot heptane, cooled, and the resulting colorless plates washed on the filter with heptane and recrystd. from EtOH yielded 112 g. (91%) 3-butyl-4-hydroxy-6-methoxycarbostyryl (XXII), white plates, m. 210-14° (recrystd. 3 times from EtOH, m. 216-18°). XXII (50 g.) refluxed 12 h. under N with 150 cc. POCl<sub>3</sub>, the excess POCl<sub>3</sub> removed by distillation, the residual hot sirup at once poured into 500 cc. crushed ice

and

H<sub>2</sub>O with vigorous stirring, the suspension made basic with dilute NH<sub>4</sub>OH, stirred 1 h., filtered, and the solid material (44 g., 77%), m. 69-73°, recrystd. 4 times from 50% EtOH gave pure 2,4-dichloro-3-butyl-6-methoxyquinoline (XXIII), gleaming platelets, m. 75-6°. XXIII (40 g.) refluxed 48 h. with 300 cc. 6N HCl, the solution cooled, the resulting white needles of the HCl salt stirred 2 h. with 300 cc. hot 5% aqueous NaHCO<sub>3</sub>, and the freed base recrystd. from CHCl<sub>3</sub> and EtOH gave 29 g. (78%) 3-butyl-4-chloro-6-methoxycarbostyryl (XXIV), white needles, m. 167-9°. XXIV (19 g.) refluxed 24 h. with 100 cc. 48% HBr and 50 cc. AcOH, the solution cooled, the supernatant liquid decanted, the residual lumpy solid refluxed again 24 h. with 150 cc. 48% HBr and 50 cc. AcOH, the mixture diluted with 150 cc. H<sub>2</sub>O, cooled, and the white crystalline deposit stirred with 200 cc. hot dilute aqueous NaHCO<sub>3</sub> and recrystd. from EtOH yielded 14 g. (80%) solid, m. 193-5°, resolidified on continued slow heating, and remelted at 213-15°; a sample recrystd. from EtOH, EtOAc-cyclohexane, and then again EtOH gave pure IX, fine needles, m. 194-7°, resolidified, and remelted at 218-21°; the higher-melting material recrystd. from EtOH gave the lower-melting form which showed the same double m.p. as before. IX gave with Pb(OAc)<sub>4</sub> in AcOH instantly a deep orange-red solution IX (5.0 g.) dissolved with warming in 80 cc. glacial AcOH, the solution treated with 70 cc. H<sub>2</sub>O and 40 cc. concentrated H<sub>2</sub>SO<sub>4</sub>, cooled to below room temperature, treated dropwise with

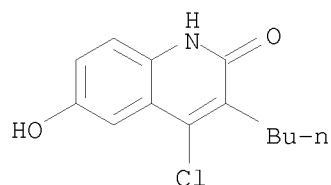
stirring

with 2.0 g. CrO<sub>3</sub> in 3.0 cc. H<sub>2</sub>O, stirred 0.5 h., poured into an equal volume of H<sub>2</sub>O, allowed to stand 5 min. with occasional stirring, filtered, and the red crystalline residue washed with H<sub>2</sub>O, stirred with 300 cc. H<sub>2</sub>O at 40°, filtered, and dried gave 4.4 g. (83%) 3-butyl-4-chloro-6-hydroxycarbostyryl-5,6-quinone (XXV), red microcrystals decomposed without melting at about 180°. Pure IX (5.0 g.) warmed with 50 cc. AcOH, 30 cc. H<sub>2</sub>O, and 2.0 g. H<sub>2</sub>SO<sub>4</sub>, the solution cooled to 40°, treated with vigorous shaking with 3.0 g. CrO<sub>3</sub> in 6 cc. H<sub>2</sub>O, and the resulting red platelets (2.7 g., 50%) recrystd. twice from AcOH, once from EtOH, and again from AcOH, and sublimed very slowly in vacuo gave, after 7 days at 140°/1 mm., 0.18 g. slightly impure XXV, bright red crystals. XXV treated with SnCl<sub>2</sub> or Zn dust in AcOH gave a white, high-melting powder, forming with aqueous alc. Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub> colorless H<sub>2</sub>O-soluble products and with

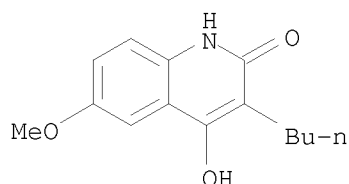
strong

NH<sub>4</sub>OH a green solution which rapidly darkened and then deposited a purple solid; it was not appreciably soluble in cold EtOH, but dissolved rapidly in EtOH containing isoprene. XXV (2.0 g.) in 20 cc. CHCl<sub>3</sub> treated with dry HCl and the resulting yellow crystalline solid boiled with H<sub>2</sub>O yielded 2.0 g. (88%) 3-butyl-4,8-dichloro-5,6-dihydroxycarbostyryl, insol. in all suitable solvents, soluble in aqueous alkali and hot pyridine with blackening; with hot AcOH-Ac<sub>2</sub>O it gave a di-Ac derivative, fine white needles, m. 237-9°

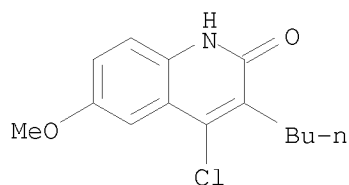
(from AcOH).  
 IT 30722-01-1P, Carbostyryl, 3-butyl-4-chloro-6-hydroxy-  
 412335-80-9P, Carbostyryl, 3-butyl-4-hydroxy-6-methoxy-  
 854834-56-3P, Carbostyryl, 3-butyl-4-chloro-6-methoxy-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 30722-01-1 CAPLUS  
 CN Carbostyryl, 3-butyl-4-chloro-6-hydroxy- (8CI) (CA INDEX NAME)



RN 412335-80-9 CAPLUS  
 CN 2(1H)-Quinolinone, 3-butyl-4-hydroxy-6-methoxy- (CA INDEX NAME)



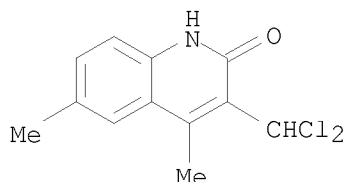
RN 854834-56-3 CAPLUS  
 CN 2(1H)-Quinolinone, 3-butyl-4-chloro-6-methoxy- (CA INDEX NAME)



L28 ANSWER 223 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1954:35986 CAPLUS  
 DOCUMENT NUMBER: 48:35986  
 ORIGINAL REFERENCE NO.: 48:6443h-i,6444a-b  
 TITLE: Quinoline derivatives  
 AUTHOR(S): Sastry, K. N. S.; Bagchi, P.  
 CORPORATE SOURCE: Indian Assoc. Cultivation Sci., Jadavpur, Calcutta  
 SOURCE: Science and Culture (1953), 18, 543-5  
 CODEN: SCINAL; ISSN: 0036-8156  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB Several quinoline derivs. were prepared p-H2NC6H4CH2CN refluxed in  
 equimolar proportions with AcCH2CO2Et 3 hrs. at 180° gave a white  
 anilide (I), m. 222°; semicarbazone, m. 252°. Attempted  
 cyclization of I in paraffin at 250° was unsuccessful. However  
 cyclization occurred in concentrated H2SO4 in 15 min. at 95°, giving

2-hydroxy-4-methyl-6-(cyanomethyl)quinoline, m. 258° (from alc.). The 4-Me group reacted with aldehydes, giving styryl and p-methoxystyryl derivs., m. 126° and 142°, resp. p-Toluidine and AcCH<sub>2</sub>CO<sub>2</sub>Et heated 3 hrs. at 170° gave an anilide, m. 185° (from alc.); semicarbazone, m. 218°. The same cyclization technique gave 2-hydroxy-4,6-dimethylquinoline (II), m. 224° (from alc.). 4-Styryl derivative of II m. 262° (from alc.). With benzoin, II gave 2-(2-hydroxy-6-methyl-4-quinolylmethylene)-1,2-diphenylethyl alc. m. 142° (from alc.). 2-Hydroxy-3-dichloromethyl-4,6-dimethylquinoline, m. 258° (from alc.), is also obtained from II. 4,2-Me(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub> condensed with AcCH<sub>2</sub>CO<sub>2</sub>Et gave an anilide (III), m. 139° (from alc.), cyclized in concentrated H<sub>2</sub>SO<sub>4</sub> gave 2-hydroxy-4,6-dimethyl-8-nitroquinoline, m. 174°. p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>, m-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>, and o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>OH anilides m. 184°, 158°, and 128°, resp., which could not be cyclized. p-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CO<sub>2</sub>H and 3,5,4-Br<sub>2</sub>MeC<sub>6</sub>H<sub>2</sub>NH<sub>2</sub> did not condense with AcCH<sub>2</sub>CO<sub>2</sub>Et.

IT 855733-85-6P, Carbostyryl, 3-(dichloromethyl)-4,6-dimethyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 855733-85-6 CAPLUS  
 CN 2(1H)-Quinolinone, 3-(dichloromethyl)-4,6-dimethyl- (CA INDEX NAME)



L28 ANSWER 224 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1954:18368 CAPLUS

DOCUMENT NUMBER: 48:18368

ORIGINAL REFERENCE NO.: 48:3370c-f

TITLE: Quinoxaline studies. IV. The preparation of  
 dl-2,6-dimethyl-1,2,3,4-tetrahydroquinoxaline and  
 dl-2,7-dimethyl-1,2,3,4-tetrahydroquinoxaline

AUTHOR(S): Munk, Morton; Schultz, Harry P.

CORPORATE SOURCE: Univ. of Miami, Coral Gables, FL

SOURCE: Journal of the American Chemical Society (1952), 74,  
 3433-4

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 46, 11210h. 2-Hydroxy-3-methylquinoxaline (2.0 g.) in 90 cc.  
 POC13 refluxed 30 min., the excess POC13 distilled off, the residue poured  
 into ice water, and the aqueous solution extracted with Et<sub>2</sub>O yielded the 2-Cl  
 analog

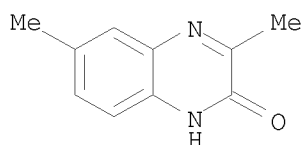
(I), m. 90-2°. I (2.0 g.) and 0.5 g. anhydrous NaOAc in 25 cc. AcOH  
 reduced 4 hrs. over 0.2 g. 5% Pd-C at 60° in 2 atmospheric H, the mixture  
 filtered, evaporated to 10 cc. on the steam bath, treated with excess 50%  
 NaOH, triturated with Et<sub>2</sub>O, and the Et<sub>2</sub>O evaporated yielded 1.1 g.  
 dl-2-methyl-1,2,3,4-tetrahydroquinoxaline, m. 70-1°. MeCHBrCO<sub>2</sub>H  
 (7.6 g.) and 15 g. 3,4-H<sub>2</sub>N(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>Me refluxed 96 hrs. on a steam bath,  
 the mixture cooled, extracted with 15% NH<sub>4</sub>OH, the alkaline solution treated

with C, and  
 the filtrate adjusted to pH 4 yielded 4.4 g. N-(6-nitro-m-tolyl)-DL-  
 alanine (II), m. 127-8°. II (2.5 g.) in 40 cc. EtOH reduced 4 hrs.  
 over 5% Pd-C at 30° in 2 atmospheric H, the EtOH evaporated on the steam bath,



the residue in 25 cc. 8% H<sub>2</sub>O<sub>2</sub> and 25 cc. 8% NaOH heated 2 hrs. on the steam bath, and the solution adjusted to pH 4 with AcOH yielded 1.6 g. 2-hydroxy-3,6-dimethylquinoxaline (III), m. 248-9°. III yielded 66% 2-Cl compound m. 76-7°; which on reduction gave 72% dl-2,7-dimethyl-1,2,3,4-tetrahydroquinoxaline (IV), m. 118-18.5°. 2-Hydroxy-3,7-dimethylquinoxaline gave 72% 2-Cl compound, m. 86-7°; which on reduction gave 60% dl-2,6-dimethyl-1,2,3,4-tetrahydroquinazoline (V), m. 115-15.5°. 3,4-(H<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>Me with ClCH<sub>2</sub>COMe yielded a mixture, b. 265-70°, which was reduced over 5% Pd-C at 60° in 2 atmospheric H<sub>2</sub> hrs. to 48% of a 1:1 mixture of IV and V, m. 88-9°.

IT 28082-84-0P, 2-Quinoxalinol, 3,6-dimethyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 28082-84-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,6-dimethyl- (CA INDEX NAME)



L28 ANSWER 225 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1951:55714 CAPLUS

DOCUMENT NUMBER: 45:55714

ORIGINAL REFERENCE NO.: 45:9546b-d

TITLE: Quinoxaline studies. II. The preparation of  
 2-hydroxy-3,6-dimethylquinoxaline and  
 2-hydroxy-3,7-dimethylquinoxaline

AUTHOR(S): Marks, Burton; Schultz, Harry P.

CORPORATE SOURCE: Univ. of Miami, Coral Gables, FL

SOURCE: Journal of the American Chemical Society (1951), 73,  
 1368-70

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 43, 7487i. 4,3-O<sub>2</sub>N(AcNH)C<sub>6</sub>H<sub>3</sub>Me (19.4 g.) and 1 g. Pd-on-C for 1 hr. at 30° and 4 atmospheric H, the solution filtered, 120 cc. water and 9.23 g. MeCHBrCO<sub>2</sub>Et (I) added, and the mixture heated on the steam bath 5 hrs., poured into 500 cc. water, and allowed to stand 12 hrs. at 5° yielded 8.42 g. N-(2-acetamido-5-methylphenyl)-DL-alanine Et ester (II), m. 126.8-7.1° (from aqueous EtOH). II (8.42 g.), 50 cc. water, and 50 cc. concentrated H<sub>2</sub>SO<sub>4</sub> stirred on the steam bath 4 hrs., cooled, neutralized, the precipitate filtered, heated on the steam bath 2 hrs. in 15 cc. 8% NaOH containing 15 cc. 3% H<sub>2</sub>O<sub>2</sub>, and the solution cooled and brought to pH 4 yielded 0.9 g. 2-hydroxy-3,6-dimethylquinoxaline, white crystals from aqueous EtOH, m. 254-5°. 3,4-O<sub>2</sub>N(H<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>CH<sub>3</sub> (7.6 g.) and 3.83 g. I 8 hrs. on the steam bath, the cooled melt extracted with 15% NH<sub>4</sub>OH and 10% HCl added yielded 1.8 g. N-(2-nitro-4-methylphenyl)-DL-alanine (III), m. 149.5-50°. III (2.65 g.) in 40 cc. EtOH containing Pd-on-C at 30° and 2 atmospheric H, filtered, and the residue in 35 cc. 10% NaOH oxidized with a stream of air at 70-80° for 18 hrs. yielded 0.9 g. 2-hydroxy-3,7-dimethylquinoxaline, m. 243-4° (from aqueous EtOH).

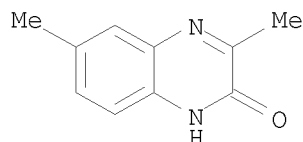
IT 28082-84-0P, 2-Quinoxalinol, 3,6-dimethyl-

RL: PREP (Preparation)

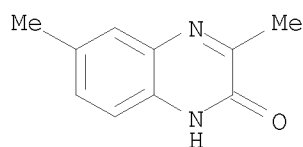
(preparation of)

RN 28082-84-0 CAPLUS

CN 2(1H)-Quinoxalinone, 3,6-dimethyl- (CA INDEX NAME)



L28 ANSWER 226 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1951:55713 CAPLUS  
 DOCUMENT NUMBER: 45:55713  
 ORIGINAL REFERENCE NO.: 45:9545i,9546a-b  
 TITLE: Synthesis of vitamin B1 and its related compounds IV  
 AUTHOR(S): Matsukawa, Taizo; Iwatsu, Takeo; Yurugi, Shojiro  
 CORPORATE SOURCE: Takeda Pharm. Inds., Ltd., Osaka  
 SOURCE: Yakugaku Zasshi (1948), 68, 285-7  
 CODEN: YKKZAJ; ISSN: 0031-6903  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB cf. C.A. 44, 4006g; 45, 8537h. The reduction with Zn and AcOH of (AcOCH<sub>2</sub>CH<sub>2</sub>CHAcS)<sub>2</sub>, obtained from Na<sub>2</sub>S<sub>2</sub> with AcOCH<sub>2</sub>CH<sub>2</sub>CHAcCl (I), gave AcOCH<sub>2</sub>CH<sub>2</sub>CHAcSH (II). The purity of II as determined by iodometry was about 80%, as was the substance mentioned in Report I (C.A. 45, 4723i). NaS<sub>2</sub>Ac with I gave AcOCH<sub>2</sub>CH<sub>2</sub>CHAcS<sub>2</sub>Ac (III), b<sub>2</sub> 120-2.5°, also obtained from II with Ac<sub>2</sub>O in C<sub>5</sub>H<sub>5</sub>N. III and 2-methyl-4-amino-5-(formamidomethyl)pyrimidine-HCl (IV) gave vitamin B1 although the yield was poor as compared to the reaction with II as reported in report I (loc. cit.). KSCO<sub>2</sub>Et with I gave AcOCH<sub>2</sub>CH<sub>2</sub>CHAcSCO<sub>2</sub>Et (V), b<sub>1</sub> 133-8°. Condensation of V and IV gave vitamin B1, but the yield was still less than when III was used. NaSMe with I gave AcOCH<sub>2</sub>CH<sub>2</sub>CHAcSMe (VI), b<sub>2.5</sub> 100-4°. VI did not react at all with IV.  
 IT 28082-84-0P, 2-Quinoxalinol, 3,6-dimethyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 28082-84-0 CAPLUS  
 CN 2(1H)-Quinoxalinone, 3,6-dimethyl- (CA INDEX NAME)



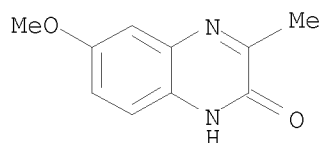
L28 ANSWER 227 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1949:41440 CAPLUS  
 DOCUMENT NUMBER: 43:41440  
 ORIGINAL REFERENCE NO.: 43:7487i,7488a-c  
 TITLE: Quinoxaline studies. I. The preparation of 2-hydroxy-3-methyl-6-methoxyquinoxaline and 2-hydroxy-3-methyl-7-methoxyquinoxaline  
 AUTHOR(S): Yolles, Seymour; Schultz, Harry P.  
 SOURCE: Journal of the American Chemical Society (1949), 71, 2375-7  
 CODEN: JACSAT; ISSN: 0002-7863  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB 3, 4-O<sub>2</sub>N(H<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>OMe (16.8 g.) and 7.65 g. MeCHBrCO<sub>2</sub>H, heated 24 hrs. at 100-5°, the cooled melt extracted alternately with three 5-ml. portions

of 1:1 NH<sub>4</sub>OH and three 15-ml. portions of H<sub>2</sub>O, acidified at 60° with AcOH, and precipitated with 10% HCl, give 46% N-(2-nitro-4-methoxyphenyl)-DL- $\alpha$ -alanine (I), orange, m. 135-5.5°. I (1.1 g.) in 20 ml. EtOH, reduced over W-2 Raney Ni at 60° and the residue in 10 ml. 5% NaOH oxidized (4 hrs.) with air at 70-80°, give 0.4 g. 2-hydroxy-3-methyl-7-methoxyquinoxaline (II), m. 240-40.5°; reduction with Zn and AcOH, followed by air oxidation, also gives II. 3, 4-H<sub>2</sub>N(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>OMe and MeCHBrCO<sub>2</sub>H give 52% N-(2-nitro-5-methoxyphenyl)-DL- $\alpha$ -alanine, m. 149-50°, 2.4 g. of which, on reduction and air oxidation, yields 0.55 g. 2-hydroxy-3-methyl-6-methoxyquinoxaline (III), m. 245-5.2°. 3, 4-H<sub>2</sub>N(AcNH)C<sub>6</sub>H<sub>3</sub>OMe (10.8 g.) and 5.43 g. MeCHBrCO<sub>2</sub>Et in 19.2 ml. EtOH and 15 cc. H<sub>2</sub>O, refluxed 4 hrs., give 68% N-(2-acetamido-4-methoxyphenyl)-DL- $\alpha$ -alanine (IV), m. 119-20°; 2.8 g. IV and 10 ml. 10% HCl, boiled 2 hrs. and the neutralized solution oxidized 12 hrs. with air at 70-80°, give 13% III. A repetition of the work of Hinsberg [Ann. 292, 249(1896)] [reaction of 3, 4-(H<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>OMe with AcCO<sub>2</sub>H] gives a mixture of II and III, m. 192-3°; repeated crystallization from EtOH gives a small quantity of III. The m.-p. curve of II and III (an equimol. mixture shows a eutectic at 193°) and their ultraviolet-absorption spectra are given.

IT 108833-49-4P, 2-Quinoxalinol, 6-methoxy-3-methyl-  
RL: PREP (Preparation)  
(preparation of)

RN 108833-49-4 CAPLUS

CN 2(1H)-Quinoxalinone, 6-methoxy-3-methyl- (CA INDEX NAME)



L28 ANSWER 228 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1949:700 CAPLUS

DOCUMENT NUMBER: 43:700

ORIGINAL REFERENCE NO.: 43:181f-i,182a-d

TITLE: Formation of quinones by oxidative demethylation and the effect of methylating agents on them

AUTHOR(S): Rao, G. S. Krishna; Rao, K. Visweswara; Seshadri, T. R.

SOURCE: Proceedings - Indian Academy of Sciences, Section A (1948), 27A, 245-57  
CODEN: PISAA7; ISSN: 0370-0089

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 42, 6812d. Oxidation of p-dimethoxy- or p-hydroxymethoxybenzene compds. by HNO<sub>3</sub> gives p-quinones readily. If addnl. OMe groups are present, demethylation of a 3rd OMe group may occur, producing a hydroxyquinone. Calycopterin di-Me ether and O4'-methylcalycopterin, like other flavones, are converted to 5,8-quinones without further change. On the other hand, 1,2,3,5-C<sub>6</sub>H<sub>2</sub>(OMe)<sub>4</sub> gives a hydroxyquinone. Certain substituted acetophenones and chalcones are simultaneously oxidized to quinones and demethylated in the position ortho to the keto group, provided that the substituents are in positions 1, 2, 3, 5 relative to each other. Methylation of hydroxyquinones gives in some cases a methoxyquinone and in others a methoxyhydroquinone di-Me ether. Calycopterin di-Me ether (0.5 g.), treated with HNO<sub>3</sub> (10 ml., d. 1.25) with vigorous stirring and allowed to stand 15 min. at 15-20°, gave

0.3 g. 3,4,6,7-tetramethoxy-5,8-flavoquinone (I), orange-red needles from C<sub>6</sub>H<sub>6</sub>, m. 194-5°. I was prepared also by oxidizing 04'-methylcalycopterin in the same way. I (0.3 g.) in 2 ml. HOAc, stirred 1 min. with 0.5 g. Na<sub>2</sub>SO<sub>3</sub>, gave on dilution 5,8-dihydroxy-3,4',6,7-tetramethoxyflavone, m. 210-12°. 1,2,3,5-C<sub>6</sub>H<sub>2</sub>(OMe)<sub>4</sub> (5 g.) in 20 ml. EtOH, treated with HNO<sub>3</sub> (20 ml., d. 1.25) and cooled below 50° 15 min., gave on dilution 2-hydroxy-6-methoxyquinone, pale yellow crystals from CHCl<sub>3</sub>, m. 240-5° (decomposition). 2,3,4,6-HO(MeO)<sub>3</sub>C<sub>6</sub>HAc (1 g.) in 10 ml. anhydrous ether treated with 1 ml. fuming HNO<sub>3</sub>, let stand overnight, diluted, and extracted with CHCl<sub>3</sub> gave 0.35 g. 2-hydroxy-4-methoxy-3,6-quinacetophenone (II), orange-red plates from C<sub>6</sub>H<sub>6</sub>, m. 158-60°. II was prepared also from 2,4,5,6-HO(MeO)<sub>3</sub>C<sub>6</sub>HAc (70% yield) and from 2,3,4,6-(MeO)<sub>4</sub>C<sub>6</sub>HAc, using a similar procedure. Passing SO<sub>2</sub> into a suspension of II in H<sub>2</sub>O gave the hydroquinone, 2,3,6-trihydroxy-4-methoxyacetophenone, crystals from C<sub>6</sub>H<sub>6</sub>, m. 170-1°. 2-Hydroxy-3,4,6-trimethoxychalcone (III) (0.5 g.) oxidized in 5 ml. HOAc with 1 ml. concentrated HNO<sub>3</sub> yielded 2-hydroxy-4-methoxy-3,6-quinochalcone

(IV), orange-red plates from CHCl<sub>3</sub>, m. 186-7°. III (2 g.) refluxed 12 hrs. in 25 ml. acetone with 2 ml. Me<sub>2</sub>SO<sub>4</sub> and 10 g. K<sub>2</sub>CO<sub>3</sub> gave an oil (V), presumably the tetramethoxychalcone. V (1 g.), oxidized in 3 ml. HOAc with 1 ml. concentrated HNO<sub>3</sub> and the product washed with ether and

crystallized from

CHCl<sub>3</sub>, yielded IV. 2-Hydroxy- $\alpha$ -naphthoquinone (1 g.) in 50 ml. anhydrous acetone refluxed 3 hrs. with 1 ml. Me<sub>2</sub>SO<sub>4</sub> and 5 g. K<sub>2</sub>CO<sub>3</sub> yielded 2-methoxy- $\alpha$ -naphthoquinone (VI), insol. in aqueous NaHCO<sub>3</sub> but demethylated by aqueous NaOH. Benzoquinone with Me<sub>2</sub>SO<sub>4</sub> gave 30% p-C<sub>6</sub>H<sub>4</sub>(OMe)<sub>2</sub>. Benzoquinone with BzCl and aqueous NaOH gave 50% p-C<sub>6</sub>H<sub>4</sub>(OBz)<sub>2</sub>. Gossypetone tetra-Me ether (VII) was converted by aqueous NaOH to 5,8-dihydroxy-3,3',4',7'-tetramethoxyflavone (50% yield). Gossypetin hexa-Me ether was prepared by methylating gossypetone or gossypetone tetra-Me ether.

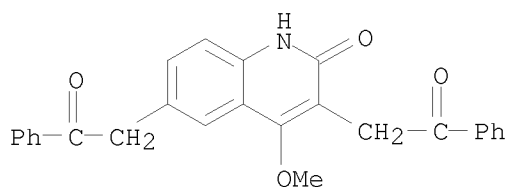
IT 857759-68-3P, 3,6-Quinoacetophenone, 2-hydroxy-4-methoxy-

RL: PREP (Preparation)

(preparation of)

RN 857759-68-3 CAPLUS

CN 2(1H)-Quinolinone, 4-methoxy-3,6-bis(2-oxo-2-phenylethyl)- (CA INDEX NAME)



L28 ANSWER 229 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1946:29340 CAPLUS

DOCUMENT NUMBER: 40:29340

ORIGINAL REFERENCE NO.: 40:5745b-d

TITLE: Some 3-alkyl-2,4-quinolinediols

AUTHOR(S): Baker, Robert H.; Lappin, Gerald R.; Riegel, Byron

CORPORATE SOURCE: Northwestern Univ., Evanston, IL

SOURCE: Journal of the American Chemical Society (1946), 68, 1284-5

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

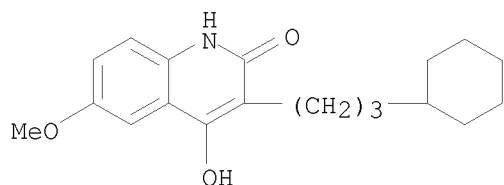
OTHER SOURCE(S): CASREACT 40:29340

AB Di-Et cyclohexylmalonate (0.11 mol) and 0.1 mol PhNH<sub>2</sub> in 50 mL. Ph<sub>2</sub>O, heated under a reflux for 1 h., give 95-8% of 3-cyclohexyl-2,4-quinolinediol, 300-5°; 6-MeO derivative, m. 233-4°; 6-Me<sub>2</sub>N derivative, starts to decompose at 234-5°. Di-Et (3-cyclohexylpropyl)malonate and 0.1 mol PhNH<sub>2</sub> in 25 mL. Ph<sub>2</sub>O, heated under a reflux for 30 min., give 3-(3-cyclohexylpropyl)-2,4-quinolinediol, m. 188-9°; 6-MeO derivative, m. 197-8°; 6-Me<sub>2</sub>N derivative, starts to decompose at 250-5°. These esters did not react with o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>. Et<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>CH(CO<sub>2</sub>Et)<sub>2</sub> and PhNH<sub>2</sub>, heated in Ph<sub>2</sub>O, Am<sub>2</sub>O, or mineral oil at 250°, give only a small quantity of (3-diethylaminopropyl)malonanilide, m. 163-4°. CH<sub>2</sub>:CHCH<sub>2</sub>CH(CO<sub>2</sub>Et)<sub>2</sub> does not react with PhN<sub>2</sub>.

IT 855765-24-1P, 2,4-Quinolinediol, 3-(3-cyclohexylpropyl)-6-methoxy-  
855765-27-4P, 2,4-Quinolinediol, 3-(3-cyclohexylpropyl)-6-dimethylamino-  
RL: PREP (Preparation)  
(preparation of)

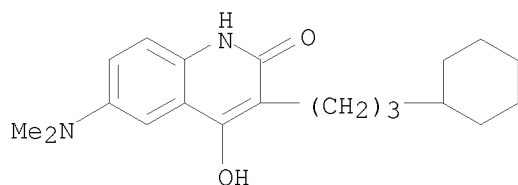
RN 855765-24-1 CAPLUS

CN 2(1H)-Quinolinone, 3-(3-cyclohexylpropyl)-4-hydroxy-6-methoxy- (CA INDEX NAME)



RN 855765-27-4 CAPLUS

CN 2(1H)-Quinolinone, 3-(3-cyclohexylpropyl)-6-(dimethylamino)-4-hydroxy- (CA INDEX NAME)



L28 ANSWER 230 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1946:24010 CAPLUS

DOCUMENT NUMBER: 40:24010

ORIGINAL REFERENCE NO.: 40:4726f-i, 4727a-c

TITLE: Synthesis of 3-alkyl-4-methylquinolines

AUTHOR(S): Searles, A. Langley; Lindwall, H. G.

CORPORATE SOURCE: New York Univ.

SOURCE: Journal of the American Chemical Society (1946), 68, 988-90  
CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 40:24010

AB The method of Knorr (Ann. 245, 358(1888)), in which PhNH<sub>2</sub> and AcCHMeCO<sub>2</sub>Et were heated in a sealed tube, yields mainly CO(NHPh)<sub>2</sub> and butanone; various modifications of the exptl. conditions did not effect significant

improvement. The fact that PhNHCOCH<sub>2</sub>Ac (I) can exist in an enol form suggested the preparation of the Na derivative and its alkylation. I (88.6 g.) and 11.5 g. Na in 500 mL. dry C<sub>6</sub>H<sub>6</sub>, refluxed 15 h., the C<sub>6</sub>H<sub>6</sub> removed on the steam bath, the residue dissolved in 600 mL. com. absolute EtOH containing 82.2 g. BuBr, and refluxed 0.5 h., give 62.4% of  $\alpha$ -butylacetoacetanilide (II), m. 88-9°. II was prepared in 13.7% yield by refluxing 4.7 g. PhNH<sub>2</sub>, 9.5 g. AcCHBuCO<sub>2</sub>Et, and a few drops of C<sub>5</sub>H<sub>5</sub>N in 60 mL. anhydrous xylene for 5 h., and allowing the solution to stand at room temperature for 6 days.

$\alpha$ -Pr derivative (III) of I, m. 85-7.5°, 52.5%;  $\alpha$ -Et derivative (IV) of I, m. 106-8°, 66.6%;  $\alpha$ -Me derivative (V) of I, m. 137-9°, 66.5%. The 2-Me derivative of I (19.1 g.) and 2.3 g. Na in 250 mL. C<sub>6</sub>H<sub>6</sub>, refluxed 2.5 h., the C<sub>6</sub>H<sub>6</sub> removed, and the residue refluxed 0.5 h. with 16.4 g. EtI in 150 mL. com. absolute EtOH, give 34.2% of 2-methyl- $\alpha$ -ethylacetoacetanilide, straw, b<sub>3</sub> 178.5-81°. The  $\alpha$ -benzyl derivative of I m. 111.5-13°, 75%; this is not cyclized by H<sub>2</sub>SO<sub>4</sub>. II (21.6 g.), added to 25 mL. precooled 98% H<sub>2</sub>SO<sub>4</sub>, the mixture allowed to stand 20 h. at room temperature, warmed a few min. on the steam bath,

and poured into a mixture of Na<sub>2</sub>CO<sub>3</sub> and crushed ice, gives 89.4% of 2-hydroxy-3-butyl-4-methylquinoline (VI), m. 170-1°; III gives 76% of the 3-Pr homolog of VI, m. 175.5-7°; IV gives 82% of the 3-Et homolog, m. 228.5-9°; V gives a quant. yield of the 3-Me homolog, m. 269-71°. VI (2.15 g.) and 6 mL. POCl<sub>3</sub>, heated at 110° for 15 min., give 68% of 2-chloro-3-butyl-4-methylquinoline (VII), pale yellow, b<sub>5</sub> 183-3.5°, n<sub>D</sub>20 1.5957; 3-Pr homolog, m. 79-80°, 96%; 3-Et homolog, m. 83.5-5.5°, 88%. VII (4.2 g.) in 50 mL. 90% AcOH at 40°, treated during 8 h. with 4.5 g. Zn, gives 50% of 3-butyl-4-methylquinoline, b<sub>1</sub> 142-3.5°, n<sub>D</sub>20 1.5803 (picrate, bright yellow, m. 162.5-4°); 3-Et homolog, b<sub>29</sub> 177-80°, n<sub>D</sub>20 1.6033, 72.4% (picrate, m. 209-10°). VI (2.15 g.) in 5 mL. 98% H<sub>2</sub>SO<sub>4</sub> at 0°, treated with 0.8 mL. HNO<sub>3</sub> (d. 1.42) and 1 mL. 98% H<sub>2</sub>SO<sub>4</sub> and the mixture allowed to stand at room temperature for 0.5 h., gives a quant. yield of 2-hydroxy-3-butyl-4-methyl-6-nitroquinoline (VIII), cream, m. 259-60°; 3-Et homolog, cream, m. 308.5-9.5°, 94%; 3-Me homolog, yellow, m. 368-9° (decomposition), 93%. VIII (0.8 g.) and 2 mL. POCl<sub>3</sub>, heated at 120° for 10 min., give 82% of 2-chloro-3-butyl-4-methyl-6-nitroquinoline, pale rose, m. 124-4.5°; 3-Me homolog, pale yellow, m. 191-4°, quant. yield.

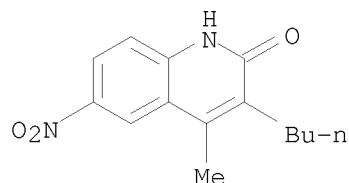
IT 855177-57-0P, Carbostyryl, 3-butyl-4-methyl-6-nitro-  
860404-56-4P, Carbostyryl, 3-ethyl-4-methyl-6-nitro-  
860404-68-8P, Carbostyryl, 3,4-dimethyl-6-nitro-

RL: PREP (Preparation)

(preparation of)

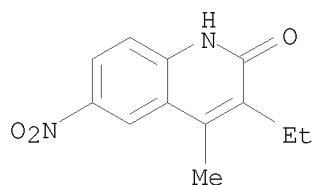
RN 855177-57-0 CAPLUS

CN 2(1H)-Quinolinone, 3-butyl-4-methyl-6-nitro- (CA INDEX NAME)

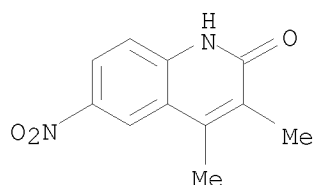


RN 860404-56-4 CAPLUS

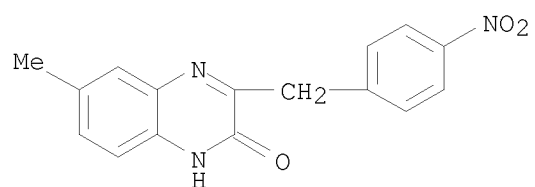
CN 2(1H)-Quinolinone, 3-ethyl-4-methyl-6-nitro- (CA INDEX NAME)



RN 860404-68-8 CAPLUS  
 CN 2(1H)-Quinolinone, 3,4-dimethyl-6-nitro- (CA INDEX NAME)



L28 ANSWER 231 OF 231 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1924:9515 CAPLUS  
 DOCUMENT NUMBER: 18:9515  
 ORIGINAL REFERENCE NO.: 18:1277a-d  
 TITLE: Condensation of ethyl oxalate with nitrotoluenes. II.  
 Condensation of ethyl oxalate with p-nitrotoluene  
 AUTHOR(S): Wislicenus, W.; Schultz, Fritz  
 SOURCE: Justus Liebigs Annalen der Chemie (1924), 436, 55-62  
 CODEN: JLACBF; ISSN: 0075-4617  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 OTHER SOURCE(S): CASREACT 18:9515  
 AB Et p-nitrophenyl-pyroracemate (IV), yellow, m. 106° (in 50-60%  
 yield), through the red K salt; by-products are dinitrostilbene and  
 dinitrodibenzyl. IV gives a deep red solution in alkalies, and a brownish  
 green to nearly black color with FeCl3. Saponification gives the free acid  
 (V),  
 yellowish green, m. 150°, soluble in Na2CO3 with a red color.  
 Reduction of IV by Sn and concentrated HCl gives a 78.5% yield of  
 p-aminophenyllactic acid, m. 188°. IV phenylhydrazone, yellowish  
 green, m. 113° and gives a deep red-violet color with concentrated H2SO4  
 and FeCl3; in hot 15% EtOH-H2SO4 there is formed Et 3-[p-  
 nitrophenyl]indole-2-carboxylate, yellow, m. 216°. IV anil,  
 orange-red, m. 76°. o-Toluidine derivative, orange-yellow, m.  
 85°; p-derivative, scarlet-red, m. 97°; α-naphthylamine  
 derivative, orange-red, m. 113°; β-derivative, scarlet-red, m.  
 137°; anthranilic acid derivative, yellow, m. 194°. With  
 1,3,4-MeC6H3(NH2)2 and IV there is formed 6-hydroxy-7-[p-nitrobenzyl]-2-  
 methylquinoxaline, yellow, m. 270°, soluble in EtOH-KOH with a deep  
 violet color. With o-H2NC6H4OH there results 6-keto-7-p-  
 nitrobenzylbenzoxazine, dark red, m. 192°. Me ester of V, yellow,  
 m. 149°. Oxime, pale yellow, m. 172-3°. Phenylhydrazone,  
 greenish yellow, m. 136-45°.  
 IT 861564-11-6P, 2(1)-Quinoxalone, 6-methyl-3-(p-nitrobenzyl)-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 861564-11-6 CAPLUS  
 CN 2(1H)-Quinoxalinone, 6-methyl-3-[(4-nitrophenyl)methyl]- (CA INDEX NAME)



=> LOG HOLD

COST IN U.S. DOLLARS

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

SINCE FILE

ENTRY

1441.56

SINCE FILE

ENTRY

-190.40

TOTAL

SESSION

2796.08

TOTAL

SESSION

-192.80

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 11:00:06 ON 08 MAY 2008